Integrated Mechanisms for Poverty Reduction for Sustainable Education & Development (IMPReSED)

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROJECT REPORT FOR THE PROPOSED IMPReSED PROGRAMME

Report Prepared for
The National Coucil for Nomadic Education in Kenya (NACONEK)

By:
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SEPTEMBER 2022

CERTIFICATION OF DOCUMENT

We, the under signed, hereby approve that all information given here in this report is accurate and true according to the best of our knowledge and understanding.

PRELIMINARY PROJECT DETAILS

PROPOSED IMPReSED PROGRAMME

Client: National Council for Nomadic Education in Kenya (NACONEK)

Programme Name: Integrated Mechanisms for Poverty Reduction Strategies for Sustainable Education & Development (IMPReSED)

Project Location:12 counties Samburu, Mandera, Wajir, Garissa, Marsabit, Kilifi, Makueni, Bungoma, Siaya, Homa Bay, Machakos and Nairobi.

ENVIRONMENTAL AND SOCIAL EXPERTS

This Environmental and Social Impact Assessment (ESIA) Report has been prepared by a team of experts in accordance with the Government of Kenya policies and regulations for Environmental and Social Assessments, African Development Bank (AfDB) Safeguard Policies, as well as the AfDB Environment, Health and Safety Guidelines.

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DEFINITION OF KEY TERMS

"Environment" Includes the physical factors surroundings of human beings including land, water, atmosphere, climate, sound, odour, taste, the biological factors of animals and plants and the social factor of aesthetics and includes both the natural and built environment.

"Environmental Management" Includes the protection, conservation and sustainable use of the various elements or components of the environment.

"Environmental Management Plan" means all details of project activities, impacts, mitigation measures, time schedule, costs, responsibilities and commitments proposed to minimize environmental impacts of activities, including monitoring and environmental audits during implementation and decommissioning phases of a project.

"Environmental monitoring" means the continuous or periodic determination of actual and potential effects of any activity or phenomenon on the environment whether short-term or long term.

"Environmental resources" includes the resources of the air, land, flora, fauna and water together with their aesthetical qualities.

"Environmentally friendly" includes any phenomenon or activity that does not cause harm or degradation to the environment.

"Developer" means a person who is developing a project which is subject to an environmental impact assessment process under the EMCA 1999.

"Mitigation Measures" Include engineering works, technological improvements, management and ways and means of minimizing negative aspects, which may include socio-economic and cultural losses suffered by communities and individuals, whilst enhancing positive aspects of the project.

"Project Report" Means a summary statement of the likely environmental effects of a proposed development referred to in section 58 of EMCA 1999.

"Proponent" Means a person proposing or executing a project, programme or an undertaking specified in the Second Schedule of the Act.

"Waste" Includes any matter prescribed to as waste and any matter whether liquid, solid, gaseous or radioactive, which is discharged, emitted or deposited in the environment in such volume composition or manner likely to cause an alteration of the environment.

"**Water"** Includes drinking water, river, stream, watercourse, reservoir, well, dam, canal, channel, lake, swamp, open drain or underground water.

ACRONYMS

AfDB	African Development Bank
ASALs	Arid & Semi-Arid Lands
CO_2	Carbon Dioxide
CBD	Central Business District
CBET	Competency Based Education Training programs
CDACC	Curriculum Development Assessment and Certificate Council
CEMP	Construction Environmental Management Plan
DBH	Diameter at Breast Height
DEMs	Digital Elevation Models
ECDE	Early Childhood Development Education
EMCA	Environmental Management and Coordination Act
EMP	Environmental Management Plan
ESIA	Environmental Social Impact Assessment
ESMMP	Environmental and Social Management and Monitoring Plan
ESMP	Environmental Social Management Plan
ESP	Economic Stimulus Programme
FGDs	Focus Group Discussions
GAM	Global Acute Malnutrition
GBV/SEA	Gender-based Violence or Sexual Exploitation and Abuse
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GIS	Geographic Information System
GRM	Grievance Redress Mechanism
Ha	Hectare
HDI	Human Development Index
HIV/AIDs	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
I.E.	Inclusive Education
ICT	Information Communication Technology
IGAs	Income Generating Activities
IMPReSED	Integrated Mechanisms of Poverty Reduction for Sustainable Education and Development
IOT	Internet of Things
JKIA	Jomo Kenyatta International Airport
KDHS	Kenya Demographic Health Survey
KESSP	Kenya Education Sector Support Program
KIHBS	Kenya Integrated Household Budget Survey
KM	Kilometers
KMTC	Kenya Medical Training College
KNBS	Kenya National Bureau Statistics
KPHC	Kenya Population and Housing Census
KPLC	Kenya Power & Lightning Company
LAPSSET	Lamu Port-South Sudan-Ethiopia-Transport
LEP	Labour & Employment Plan
LPG	Liquefied Petroleum Gas
LULC	Land Use Land Cover
MEAs	Multilateral Environmental Agreements
MW	Mega Watts
NACONEK	National Council for Nomadic Education in Kenya

NER	Net Enrolment Ratio
NESP	National Education Sector Plan
NG-CDF	National Government Constituencies Development Fund
NGO	Non-Governmental Organization
NIWFESS	NACONEK Integrated Water Food and Energy Solutions for Schools
OOSC	Out-of-School Children
OP	Operational Policy
OSHA	Occupational Safety and Health Act
P/PET	Potential Evapotranspiration
PIU	Programme Implementation Unit
PPE	Personal Protective Equipment
SEIA	Social Economic Impact Assessment
SMART	Standardized Monitoring and Assessment in Relief and Transitions
sq. KM	Square Kilometers
TVET	Technical, Vocational Education and Training
UN	United Nations
USD	United State Dollar
VTC	Vocational Training Centres
WASH	Water, Sanitation and Hygiene
WB	World Bank
WMP	Waste Management Plan
WRA	Water Resource Authority

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EXECUTIVE SUMMARY

Introduction

The *National Council for Nomadic Education in Kenya* (NACONEK) hereafter referred to as 'the Proponent', intends to implement the proposed Integrated Mechanisms of Poverty Reduction for Sustainable Education and Development (IMPReSED) Programme. The IMPReSED is a five-year USD 50 million Programme to address barriers to education and to increase enrollment among Out of School going Children (OOSC) and youth in **12 counties** under NACONEK mandate. The Counties include Samburu, Mandera, Wajir, Garissa, Marsabit, Kilifi, Bungoma, Makueni, Siaya, Homa Bay, Machakos and Nairobi.

The proposed IMPReSED Programme seeks to address equity in access to education in the Arid and Semi-Arid Lands (ASAL) of Kenya and to address barriers to education such as poverty and migration exacerbated by climate change impacts. The Objective of the Programme is to increase access to quality education, skills development, and employability for OOSC (6 – 17 years old) and youth (18 – 35 years old) in ASAL areas in Kenya. Specifically, the Programme aims to**:**

- Increase access, quality and retention of 455,000 OOSC in basic education and integrated Technical and Vocational Education and Training (TVET) programs;
- To increase access to skills development and employability for 5000 unemployed youth; and
- To promote sustainable and resilient livelihoods for households with OOSC and youth.

The Programme involves four primary components:

Component 1: Increase access, equity and retention of OOSC in basic education
Component 2: Increase Skills development and employability for OOS Youth
Component 3: Sustainable and resilient livelihoods to promote enrollment, food security and employment
Component 4: Strengthening Institutional Capacity.

The proposed project targets to expand the following **Programme Infrastructural Activities** that are likely to have environmental and social impacts:

Table 0.1 Summary of Specific Activity Types, Counties and Number of Institutions

	Activity Types	Sub activity	Counties	Number of Institutions
1	Integrated Water Security	10 Solarized boreholes and water kiosks	Marsabit, Mandera, Garissa, Wajir, Samburu,	10 Learning Institutions
2		4 Truncated ponds	Garissa, Mandera, Wajir, Kilifi	4 Learning Institutions
3		10 Micro irrigation schemes	Marsabit, Mandera, Garissa, Wajir, Samburu,	10 Learning Institutions
5	Integrated Food Security	43 Intercroping of Planting of Trees, grass, and food crops with Organic Inputs/Fertilizer in 2-5 Acres	Marsabit, Mandera, Garissa, Wajir, Samburu, Bungoma, Homabay, Siaya, Machakos, Nairobi	43 Learning Institutions

7	Integrated Clean Energy for cooking and safe food storage	40 Energy Saving Jiko	Marsabit, Mandera, Garissa, Wajir, Samburu, Isiolo, Kilifi, Bungoma, Homabay, Siaya, Machakos, Nairobi	40 Learning Institutions
8		20 Steam cooker	Marsabit, Mandera, Garissa, Wajir, Samburu, Isiolo, Kilifi, Bungoma, Homabay, Siaya, Machakos, Nairobi	10 Learning Institutions
9		10 Silos for food storage	Marsabit, Mandera, Garissa, Wajir, Samburu, Isiolo, Kilifi, Bungoma, Homabay, Siaya, Machakos, Nairobi	10 Learning Institutions
10	Micro Hub	Computer Lab ICT, Sewing Lab, Micro Model Far and Brick Maker	Marsabit, Mandera, Garissa, Wajir, Samburu, , Kilifi, Bungoma, Homabay, Siaya, , Machacos, Nairobi	4 Micro hub projects in each County
12	Institution Rehabilitation	Wall Painting and Black Boards (desks)	Marsabit, Mandera, Garissa, Wajir, Samburu, Isiolo, Kilifi, Bungoma, Homabay, Siaya, Machakos, Nairobi	43 Learning Institutions
13		Fencing	Marsabit, Mandera, Garissa, Wajir, Samburu, Isiolo, Kilifi, Bungoma, Homabay, Siaya, Machakos, Nairobi	43 Learning Institutions
14	Construction	20 New Classrooms	Garissa, Wajir, Samburu.	4 Learning Institutions
15		10 Toilet Block with Biodigester and hand washing station	Marsabit, Mandera, Garissa, Wajir, Samburu,	10 Learning Institutions
16		10 Girls Hostel (beds, bedding, nets)	Marsabit, Mandera, Garissa, Wajir, Samburu,	10 Learning Institutions

The detailed project scope entails:

1. **Integrated Water, Sanitation and Hygiene (WASH)** to ensure water for mini-irrigation and drinking water are available. The activities will be implemented in institutions (schools and TVETs). Specific activities include:
    - Construction of ponds (truncated, sausage and pyramid tanks/ ponds) which are less than one million litres capacity;
    - Construction of boreholes
    - Reverse osmosis of water from boreholes;

2. **Integrated Food security program.** Specific activities include:
    - Micro-irrigations (2-10 acres in selected schools) and kitchen gardens to establish school farms for local food production & development;
    - Pasture for Access under sustainable livelihoods;

- Establishment of *Gliricidia Sepium*, sunflower, and water melon farms that will be managed by a school committee and monitored by the NACONEK focal point for food
- Link to Established sites and rehabilitate sites to link community to value addition and market for food security and malnutrition components.

3. **Integrated Clean Energy Programme** to ensure reduced use of firewood and charcoal in Institutions (schools and TVETs). Specific activities include:
    - Solar energy (for solar pumping of water, lighting and charging of appliances); and
    - Bio-energy (*Gliricidia* briquettes)
    - Instalation of clean cooking systems with Steam cooker or energy saving jiko
    - Instalation of clean food storage with food silos (one ton steel structures)

4. **Institution (schools, TVET) infrustructure improvements.** Specific activities include:
    - Fencing; and
    - Class rooms renovations and bathrooms
    - Establishment of sanitation blocks including toilets, biodigester and handwashing stations
    - Establishment of hostels for girls
    - Establishment of new classrooms

5. **Upgrading ICT infrastructure for offline blended learning and digital resource centers. Specific activities include:**
    - Establishment of micro innovation hubs.

Objective of the ESIA

The Programme Infrastructural activities component is likely to cause environmental and social impacts. This includes activities that will be carried out during construction and operational phase of the project. The Kenya Government policy on projects of such nature and scale, programmes or activities requires that an Environmental Impact and Social Assessment be carried out at the planning stages of the proposed undertaking to ensure that significant impacts on the environment are taken into consideration during the design, construction, operation and decommissioning phases of such projects, programmes or activities. It is also a requirement by the African Development Bank safeguard policies to conduct ESIA for similar projects. Therefore, in compliance with the law and to avoid unnecessary conflicts that may impede development, the proponent undertook this Environmental and Social Impact Assessment and incorporated environmental and social concerns as required.

The purpose of an ESIA process is to identify potential impacts of the proposed project, avoiding the avoidable and proposing appropriate measures for mitigating the unavoidable ones for the purposes of ensuring sustainable development. In so doing, adverse impacts are minimized while enhancing project benefits. To ensure commitment of the proponent in management of the environmental and social impacts, the ESIA also provides a sound monitoring and supervision framework for ease of monitoring the mitigations measures identified.

Methodology

The ESIA is being undertaken in fulfilment of the Environmental Management Coordination Act (EMCA) 1999, as amended in 2015 Schedule II that identifies activities/projects that require an Environmental Impact Assessment (EIA) to be conducted prior to implementation

in order to identify the potential adverse impacts and thereby devise appropriate mitigation measures. The ESIA is also aligned to the relevant World Bank's Environmental and Social Framework of 2017 and African Development Bank's Operational Safeguards.

The methodology for the study involved

Public participation and consultation sessions: were held with various stakeholders including neighboring residents, institutions, lead government agencies, design architectural team, and other professionals relevant to the project.

Document Review
A literature review was undertaken as part of the scoping process, which involved reviewing legislation, policies, County Development Plans and previous studies carried out in the area to determine the baseline conditions and establish the legal, institutional and biophysical and socioeconomic environmental setting of the proposed Programme. The desk-based study also included the development of fieldwork tools, fieldwork schedules as well as the approach to stakeholder engagement. The approach also entailed conducting analysis of project designs and activities, desktop studies to obtain relevant secondary data for analysis and interpretation.

Site Visits
Detailed site investigations were then undertaken during which further stakeholder engagement was undertaken and primary environmental and social data was collected through:

- A number of stakeholder meetings with programme team, community team and local community, schools (including virtual meetings);
- Site walkovers.

Photography and Global Positioning Systems (GPS) were used to record the salient features and baseline conditions in the Programme sites and their surroundings. The photos were used to define existing features in the Programme Area and identify soils and floral species. Photography was combined with transect walks and used to identify possible impacts of the proposed Programme. All the relevant images were stored and are attached to this Report.

Impact Assessment Methodology
The purpose of impact assessment and mitigation is to identify the significant potential impacts on identified receptors and resources according to defined assessment criteria and to develop and describe measures that will be taken to avoid or minimise any potential adverse effects and to enhance potential benefits.

The assessment methodology defines impact types such as whether impact is positive or negative, direct or indirect and then assesses significance of impact. Significance is a function of the **magnitude** of the impact and the **sensitivity/vulnerability/importance** of **resource/ receptor. M**agnitude is a function of the characteristics such as **type, extent, duration, scale** and **frequency** of the impact.

In determining impact significance, you look at magnitude of the impact and the sensitivity/vulnerability/importance of resource/receptor. As presented in Table 0.2 below, the impact significance can be Negligible, Minor, Moderate or Major.

***Table 0.2* below, the impact significance**

SIGNIFICANCE				
MAGNITUDE		**Sensitivity/ Vulnerability/ Importance of Resource/Receptor**		
		Low	Medium	High
	Negligible	Negligible	Negligible	Negligible
	Small	Negligible	Minor	Moderate
	Medium	Minor	Moderate	Major
	High	Moderate	Major	Major

Mitigation and enhancement measures for activities with significant impacts are then recommended. The implementation of the mitigation is ensured through compliance with the Environmental and Social Management and Monitoring Plan (ESMMP).

Project Scope

The Table below outlines the Programme counties, institutions, locations and proposed infrastructure activities

The programme infrastructure components are likely to have environmental and social impacts. In order to proceed with implementation of this project without causing adverse impacts on the environment, the project was screened and based on the potential E&S impacts identified, it was recommended that an ESIA be prepared to ensure that the implementation of the project is in line with Environmental and Social Safeguards as well as Government of Kenya legal requirements.

Based on the nature of works of the project as well as magnitude and duration of anticipated environmental and social impacts arising from the implementation and operations of the project after screening was assigned Environment Assessment Category C in accordance with the African Development Bank environmental and social safeguards policies and low risk according to Government of Kenya EMCA regulations.

Policy and Legal Framework

The applicable legal and policy frameworks relevant to the IMPRESeD Project are provided in the report, section 4.3 describes the policy and legal, frameworks, institutional framework (Table), social statutes (Table) including African Development Bank Safeguard policies (Table) and African Development Bank Group EHS Guidelines and other relevant Good International Industry Practice.

Environmental and Social Baseline Conditions

The programme anticipates having interventions in 43 learning institutions, including:

1. The 7 ASAL regions with 40 learning institutions (36 primary schools and 7 TVETs). This is distributed in the ASALs into 3 primary schools and 1 TVET per county.
2. The 4 Counties targeted with Pockets of poverty regions has a total of 15 learning institutions includes 2 primary schools per county, for a total of 12 primary schools, 1 secondary school and 2 TVETs.
3. The 1 urban informal settlement targeted include 5 primary schools and 1 secondary school.

The baseline information of the programme is categorized under:

- Site Specific baseline information
- Biophysical Baseline Condition of Counties
- Socio-economic Baseline Condition of the Counties

Specific baselines of project sites in the proposed institutions in the 10 selected counties are as shown in Table 0-2 below

	County	Learning Institutions	Coordinates	County Baseline Summary (Average)
1	Marsabit	**Saku Vtc**	**2.287571°, 38.084838°**	The learning institutions in Marsabit belong to rural pastoralist communities. The topography of the area is 75% flat. About one quarter of the area has 30% grass cover while a half of the area has 50% sparsely populated indigenous tree cover. The total land size for all the four institutions of Marsabit county within the IMPReSED programme is 72 acres. Three of the institutions have a fence with a gate. Most classrooms are in good condition. The four learning institutions have a total of 29 classrooms, 8 dormitories and 2 dining halls. The institutions have 27 TSC teachers and a total enrollment of 1427 learners (201 boys and 1226 girls) out of which 20 are PWDs. In respect to social amenities, lunch is provided to all students while 952 reusable sets of dignity packs are provided to girls annually. 50% have no water source at all while the remaining depend on boreholes and rainwater harvesting. The cost of water per term generally more that KES. 20,000/-. All the four institutions have a total of 34 latrines 50% of which are gender segregated. In terms of energy, 75% of the institutions have access to electricity that is more often available. However, they depend entirely on firewood for cooking.
		Helmer Memorial Girls Primary School	3.312699°, 37.057312°	
		Dukana Girls Primary	2.337843°, 37.991607°	
		Segel Primary School.	3.322623°, 37.072309°	
2	Mandera	Fincharo Primary	2.926767°, 40.505349°	Learning institutions in Mandera are located in an area of rural pastoralist communities. The topography of the area is 50% flat. About a quarter of the area has 30% grass cover while three quarters have 50% sparsely populated indigenous tree cover. The total land size for all the four institutions of Mandera county under the IMPReSED programme is 92 acres. Two of the institutions have a fence while three have a gate. Most classrooms are in good condition. The four learning institutions have a total of 33 classrooms, 2 dormitories and 2 dining halls. The institutions have 16 TSC teachers and a total enrollment of 1595 learners (1091 boys and 504 girls) out of which 136 are PWDs. In respect to social amenities, lunch is provided to 50% of the students while 5409 reusable sets of dignity packs are provided to girls annually. 50% of the water source is rain, 25% is river water. Additionally, 50% practice rainwater harvesting. The cost of water per term is generally more than KES. 5,000/-. All the four institutions have a total of 20 latrines 25% of which are gender segregated. In terms of energy, 25% of the institutions have access to electricity that is not often available, however, they depend entirely on firewood for cooking.
		Mado Primary School	3.973086°, 41.113808°	
		Chief Dahir Arab Pri		
		Mandera Technical Training Institute	**3.973086°, 41.113808°**	
3	Garisssa	Bura Boarding Primary	-1.090075, 39.946345	The learning institutions in Garissa are in an area where 75% of the inhabitants are pastoralist while the rest are mixed farmers. The topography of the area is 75% flat. The area has 30% grass cover while indigenous tree cover is variable. The total land size for all the four institutions of Garissa County is 196 acres. Only one school has a fence and a gate. A half of the classrooms in these institutions are in good condition. The four learning institutions have a total of 39 classrooms, 7 dormitories and 2 dining halls. The institutions have 30 TSC teachers and a total enrollment of 1352 learners (764 boys and 588 girls) out of which 18 are PWDs. In respect to social amenities, lunch is provided to all the students while the 3490 reusable sets of dignity packs are provided to girls annually. 25% of the water source is boreholes, while 75% is river water. The cost of water per term is generally more that KES. 5,000/-. All the four institutions have a total of 33 latrines all of which are gender segregated. In terms of energy, there is electricity most of the time to all the institutions, however, most of them depend on firewood.
		Raya Primary	3.973086°, 41.113808°	
		Ege Primary School	3.973086°, 41.113808°	
		Ijara Technical And Vocational College	**-1.633753° 40.155991°**	

4	Wajir	Wajir Primary	1.744603°, 40.055563°	The learning institutions in Wajir are located in a flat area where 67% of the inhabitants are pastoralists. The area has 30% grass cover and 50% indigenous tree cover. The total land size for all the three institutions of Wajir county in the IMPRReSED programme is 85 acres. Two of the institutions have a fence and a gate. The conditions of the classrooms is average. The three learning institutions have a total of 39 classrooms, 8 dormitories and 2 dining halls. The institutions have 29 TSC teachers and a total enrollment of 1439 learners (877 boys and 562 girls) out of which 355 are PWDs. In respect to social amenities, lunch is provided to only 33% of the students while the 139 reusable sets of dignity packs are provided to girls annually. Water is accessed from sources (boreholes, river & RWH). The cost of water per term is generally more that KES. 10,000/-. All the three institutions have a total of 18 latrines 75% of which are gender segregated. In terms of energy, there is 67% of access to electricity 33% of the time. However, all of them depend on firewood.
		Wajir South Technical and Vocational College	**TBD (To Be Determined)**	
		Ajawa Primary School	2.960617°, 39.688287°	
		JUKALA Primary	TBD (To Be Determined)	
5	Samburu	Marti Primary School	1.472612°, 36.719702°	The four learning institutions in Samburu are located in an area that is 75% flat. Three quarters of the rural inhabitants are pastoralists. The area has < 35% grass cover and < 50% indigenous tree cover. The total land size for all the four institutions of Wajir county in the IMPRReSED programme is 57 acres. Three of the institutions have a fence and a gate. The condition of the classrooms are generally good. The four institutions have a total of 30 classrooms, 4 dormitories and 1 dining halls. The institutions have 31 TSC teachers and a total enrollment of 1112 learners (boys 659 and 453 girls) out of which 20 are PWDs. In respect to social amenities, lunch is provided all the students while the 1220 reusable sets of dignity packs are provided to girls annually. Water is accessed from sources (boreholes, river & RWH). The cost of water per term is generally more that KES. 5,000/-. All the four institutions have a total of 28 latrines 75% of which are gender segregated. In terms of energy, there is 50% of access to electricity 75% of the time. However, all of them depend on firewood.
		Samburu Central	TBD (To Be Determined)	
		Lkisin Pry School	TBD (To Be Determined)	
		Maralal Vocational Training Center	**1.090620°, 36.697513°**	
		Mtembur primary School	TBD (To Be Determined)	
		Kitelakapel Technical Training Institute	**TBD (To Be Determined)**	
6	Kilifi	Kasikini Primary	-2.951569°, 39.775030°	The four learning institutions in Kilifi are located in an cosmopolitan county whose inhabitants are mixed farmers. The area is generally flat. Three quarters of the area has 45% grass cover and < 50% indigenous tree cover. The total land size for all the four institutions of Kilifi County in the IMPRReSED programme is 54.5 acres. Two of the institutions have a fence and a gate. Three of the institutions have generally good buildings conditions. All the four institutions have a total of 32 classrooms, all with no dormitories or dining halls. The institutions have 24 TSC teachers and a total enrollment of 1451 learners (boys 743 and 708 girls) out of which 34 are PWDs. In respect to social amenities, lunch is provided all the students while the 12250 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from rain. The cost of water per term is generally less than KES. 5,000/-. All the four institutions have a total of 46 latrines 50% of which are gender segregated. In terms of energy, there is 75% of access to electricity 25% of the time. However, all the institutions depend on firewood.
		Changoto Primary	-2.806684°, 39.888250°	
		Soso Chamari Primary School	-2.905911°, 39.898266°	
		Dida Primary School Sukoke	TBD (To Be Determined)	
		Mariakani Vocational Training Centre	**-3.860785°, 39.482785°**	
7	Bungoma	Nakalira Rc	0.605067°, 34.428789°	The two learning institutions in Bungoma are located in an area whose inhabitants are mixed farmers. The area has undulating hills of 10% - 30% slopes with about 50% grass cover and < 50% tree cover.

		Chepkube Sa Primary	0.829725°, 34.427548°	The total land size for all the two institutions is 7.2 acres. All of them have a fence and a gate but with poor building conditions. All the two schools have a total of 23 classrooms each with approximately 100 learners, and no dormitories or dining halls. The institutions have 26 TSC teachers and a total enrollment of 1438 learners (boys 721 and 717 girls) out of which 109 are PWDs. In respect to social amenities, lunch is provided all the students while the 3600 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the tap (50%). The cost of water per term is generally > KES. 10,000/-. All the four institutions have a total of 33 latrines 50% of which are gender segregated. In terms of energy, there is 50% of access to electricity that is available most of the time. However, all the institutions depend on firewood.
8	HomaBay	Lambwe Primary School	-0.575156°, 34.369833°	The two schools in Homa Bay are located in an area whose inhabitants are mixed farmers and fishermen. The area has gently undulating hills of < 30% slopes with about 40% grass cover and < 50% tree cover. The total land size for all the two institutions is 28 acres. Only one school has a fence but both have no gates. All the two schools have a total of 16 classrooms each with approximately 113 learners, one dormitory and no dining halls. The schools have 19 TSC teachers and a total enrollment of 890 learners (boys 463 and 430 girls) out of which 9 are PWDs. In respect to social amenities, lunch is provided all the students while the 3200 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the tap (50%). The cost of water per term is generally > KES. 10,000/-. All the four institutions have a total of 33 latrines 50% of which are gender segregated. In terms of energy, there is access to electricity most of the time and all the institutions depend on firewood.
		Ndhuru Primary	-0.528460°, 34.463399°	
		Ogande Girls Secondary	TBD (To Be Determined)	
9	Siaya	Uuna Primary School	0.006197°, 34.346686°	The two rural institutions considered for Siaya county are Kochieng and uuni primary schools. They are located in a gently undulating landscape of < 30% slope. They are in an area occupied by mixed farmers. The landscape is a mosaic savanna of 50% grassland and >75% tree cover. The total land size for the two schools is 1.82 acres. Only one school has a gate with both not being fenced. Otherwise the general condition of the school buildings is below average. The two schools have a total of 17 classrooms with an average of 49 learners per class. They do not have dining and boarding facilities. The schools have 24 TSC teachers and a total enrollment of 759 learners (boys 382 and 375 girls) out of which 13 are PWDs. In respect to social amenities, 1900 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the rainfall but barely adequate. The cost of water per term is generally > KES. 5,000/-. All the three institutions have a total of 26 latrines that are gender segregated. In terms of energy, there is access to electricity on a fairly regular basis. All the institutions depend on firewood.
		Kochieng Primary School	TBD (To Be Determined)	
		Parla Primary School	TBD (To Be Determined)	
		Siaya Innovation hub	TBD (To Be Determined)	
		Githiga Primary School	-0.710016°, 36.943290°	
		tutu pry school	-1.210689°, 36.608210°	

10	Machakos	tumu tumu	-0.802838°, 37.299576°	Mukengesya Primary in Machakos county is a rural school where the community practice mixed farming. The area is generally flat. The landscape is a mosaic <30% grass cover and > 75% tree cover. The total land size for the school is 3 acres. The condition of the school is fair but is does not have either a fence or a gate. The school has a total of 7 classrooms with an average of 14 learners per class. They neither have dormitory nor dining halls. The schools have 6 TSC teachers and a total enrollment of 108 learners (boys 64 and 44 girls) and no PWDs. There are no cases of pregnant girls recorded either. In respect to social amenities, 90 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the river and it is inadequate. The cost of water per term is generally < KES. 5,000/-. The school has 3 latrines which are gender segregated. In terms of energy, there is no access to electricity although they depend on firewood for cooking.
		Kaliluni pry school	-1.491906°, 37.308605°	
11	Nairobi	Kangemi Primary	-1.270712°, 36.748391°	The two schools in Nairobi are located in urban informal settlements. The area is gently flat with < 5% slopes and about 50% tree cover. The total land size the two schools is 9.2 acres. Both schools have good condition of their buildings. They are also well fenced. The two schools have a total of 66 classrooms each with approximately 135 day scholar learners. They do not have dining halls either. The schools have 65 TSC teachers and a total enrollment of 3848 learners (boys 1872 and 1976 girls) out of which 31 are PWDs. In respect to social amenities, lunch is provided 50% of students while 13760 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the tap (50%) as well as borehole. The cost of water per term is generally > KES. 5,000/-. All the four institutions have a total of 79 latrines all of which are gender segregated. In terms of energy, there is access to electricity all the time. All the institutions depend on firewood.

Project Alternatives to the Proposed Project

The ESIA considered the following alternatives: (no-go alternative, design and technology alternative, site alternative, and needs assessment report alternative).

- **No-Go Alternative Option**

Under the 'No Action' alternative, the Proponent would not carry out the intended IMPReSED programme activites and the anticipated impacts resulting from the programme's commissioning and operation of the Programme as proposed would not occur. Additionally, the resultant socio-cultural/economic benefits that would be created by the proposed development would also be foregone.

The no Programme alternative is expensive in the long term and would involve unmitigated hindrance to equal access to education, quality and relevant education, skills development and employability of OOSC and community resilience with sustainable livelihood. This is therefore not a desirable alternative.

- **Design and Technology Options**

Environmentally well-suited ponds design such as truncated pyramid pond and sausage tanks was considered against open ponds/tanks that are prone to evaporation and exposed to contamination.

- In terms of technology options for construction of classes, climate smart infrastructure that takes cognizance of ventilation and temperature moderation was considered against higher and cooler infrastructure development technologies.
- Cheaper inter-locking blocks making machines was considered against brick-and-mortar technologies using a lot of cement and concrete.
- Design options also considered include raised roof and large window size for air circulation and ventilation against lower roof ceiling and smaller window size. Raised roof and large window sizes of classrooms design is best for hot environments like most of the programme site areas of ASAL in Kenya.
- The alternatives to design on toilet would be the use of VIP toilets a or dig the latrines but this would be depebdebale on the budget available and the soil type of the areas where the project is being implementes
- The boreholes in the ASAL areas would prompt the use of the sundams, water harvesting options cause of the nature of the ASAL areas which would be determined by the location of the boreholes and the frequency of abstraction.
- The alternative to renovating the classrooms could be very costly vis avi doing a new construction and construction of new classrooms could be alternative to do renovation as some classrooms are in vast dilapidated state.
- Micro irrigation alternatives is really dependent on the availability of land of between 2 to 10 acres and this will be determined by which schoolhas this land available which could prompt alterternatives to sites and school location

- **Site Selection Option**

The programme considered alternative sites selection. Farming and micro-irrigation of community lands was considered against use of school lands. Community lands was realised to be requiring land ownership documentation and is more prone to conflict than use of school lands.

- **Needs assessment**

Another consideration made is which counties were most appropriate to site the programme activities. 12 counties were selected for implementation sites of the programme. Other considerations made include

1. **Education:** Access, Gross Enrolment Rate (GER) Net Enrolment Rate (NER) Out of School Children (OOSC), Performance, School density, Pupil Teacher Ratio (PTR) Gender Parity Index (GPI), security, completion and transition;
2. **Socioeconomic:** Poverty Index, Distance, Population density, area security, community consent of land usage, willingness and consent to participate in the program, Other multispectral interventions, coordination and approval by the Ministry of Interior, Ministry of Health, Ministry of Youth and Gender, Other agency interventions to coordinate with, such as Community Based Organizations (CBOs), Non-Government Organizations (NGOs), UN Agencies;
3. **Biophysical:** Water availability and accessibility, Other multisectoral interventions, coordination and approval by Ministry of Agriculture, Ministry of Water, Kenya Forestry Services;
4. **Harmonization and Linkage to ongoing relevant projects: Porridge for schools innitiative:** Bungoma, Nairobi, Isiolo, Garissa, Wajir implement porridge for schools' initiative.
5. **Harmonization to National Projects:** LAPSSET Project- the new roads constructed in the North will facilitate linking livestock and other agricultural products to market.

Stakeholder Consultations

Stakeholder consultations were conducted at all the various stages of project planning including; inception, during detailed field studies and are expected to continue throughout the implementation phase. The objectives of consultations during the ESIA study were to share project information with key stakeholders, to raise awareness, obtain baseline information, and to allow stakeholders the opportunity to make comments and express their views on the proposed project.

The stakeholder engagement mechanisms employed during this study included

- Planning and information sharing meetings with Multi- Sectoral National stakeholders,
- Self administered quesstionnares
- Focused group discussions/Community Meetings

A total of Five (5) institutional meetings were conducted and 12 community meetings were conducted across the NACONEK Mandaated areas. Records of the meetings conducted both in the Scoping and ESIA engagement phases (including the attendance registers) are included in *Annex B4* and photos are presented in *Annex B5*.

The main outcomes from the stakeholder Engagements are outlined in *Table 0.2* below.

Table 0.2 Outcomes of Scoping and ESIA stakeholder Engagement

Theme	Issue
Employment	• A powerful human labour to enhance the programme success through the targeted Ministries • Jobs for the local communities • That the Programme gives priority to the local community when recruiting casual labourers • Requests that the Programme promotes gender equality when providing the casual labour
Environmental Impacts	• Increased demand for fuel wood for the school meals presents the risk of child labor and environmental degradation especially in ASAL areas where availability of fuel wood is a challenge. We need to ensure the energy saving jikos and briquettes will be available to schools.

	• Climate change related impacts such as excessive rainfall leading to mudslides and flooding, that adversely affect school infrastructure and cause disruption in learning activities. It is important to ensure the planned school infrastructure are climate proofed. • Increased demand for water presenting a risk of increased pressure on the available water resources especially in the ASALs. This may also lead to the risk of child labor where learners are requested to carry water for food preparation. Creating a system to ensure schools participating have access to water. • The community requested for planting of natural and exotic trees in the the Programme area to replace those that shall be cut during construction. • The contractor to ensure mitigation measures are undertaken to ensure that soil erosion doesn't occur as a result of the construction • Flooding areas should be considered for water pan construction and should be carried out to harvest the storm water.
Construction	• Need for Provision of a fence around schools. As this has resulted in increased incidences of insecurity and theft of building materials resulting in schools incurring additional expenses. • The risk of flooding of neighboring homes and other infrastructures such as roads because of the large surface provided by the school roofs and lack of appropriate storm water drainage channels in schools. The stakeholders recommended that designs of proposed school infrastructure to provide for roof water harvesting and storage. • Unavailability of adequate land for establishment of school infrastructure may necessitate the MoE to consider storey building during the design of school infrastructure. • School Land issues; may need to work with counties to develop a strategy to ensure schools in community land have land titles • Request for the Contractor to purchase raw materials locally
Community Health and Safety	• Addressing universal healthcare at a community and school level. The Health for Schools Programme which includes deworming can harmonize and be coordinated with the fortified porridge programme to bring OOSC but also ensure that they are able to keep the nutrition as well as be included as a check-up for the schools running the back-to-school campaigns for OOSC. • Working in partnership with Community Health Workers at a school and community level will assist with community mobilization and sensitization (parental engagement) of health and reduce negative social norms with health and education. • Dust from construction • Lack of guidelines for handling and disposal of sanitary waste in schools presents the risk of pollution. Presently the sanitary waste is disposed in pit latrines causing the pit latrines to fill up quickly. There is need to improve on sanitary waste management. • School fires as a result of the school meals programme presents safety risk to learners and school infrastructure. This is a growing concern given the ongoing unrest in schools and increasing incidences of school fires by learners.
Community Development	• Social and cultural concerns that were missed came up in these meetings although avenues for their address have been provided. • Introduction of a poverty mapping tool, created by state house, as a way to have a baseline for households in the programme as well as monitor their socio-economic growth. • Providing dignity kits to school girls in marginalized counties will reduce barriers to learning as well as increase the health of the overall school community. • Request for construction of schools and provision of boarding facilities to enable more pupils to access basic education. • Request for Water pans/ dams and boreholes

Cultural Heritage	• Identification of heritage areas to be done with help of the elders for proper identification • feedback on issues of cultural, social, gender, disabilities, health amongst other themes • Sensitization on the importance of education in pastoral communities so that they can appreciate the value of education and minimize engagement of learners in their pastoral lifestyle, especially in counties such as Turkana. • Sustainability challenges. Make sure there is proper management of income generating activities so that the Programme can incorporate sustainability measures in all activities. • Ineffective communication and disclosure of programme information may lead to increased complaints and grievances from stakeholders. For instance, the selection criteria for schools chosen needs to be robust as well as effectively communicated and disclosed to stakeholders.
Access to education	• Sensitize parents and caregivers on positive parenting to enable them to accept to support the young mothers. • Pilot provision of caregiver services within the school to allow for the young mothers to learn. This can be modelled around the Safaricom's caregiver services, which has been a success. • MoH should provide learner friendly advocacy services on sexual and reproductive health. • MoE to ensure provision of psychosocial support to learners who have experienced teenage pregnancies. • MoE needs to ensure that schools provide a disability friendly environment. The limited access to requisite assistive devices, disability-friendly infrastructure has limited access to education for children with disabilities. In addition, MoE needs to ensure that teachers need to have basic skills for engaging learners with special needs and disability as this will go a long way to facilitate integration of such learners. MoE can enhance these efforts by: ✓ Sensitizing parents with disabled children to encourage such learners to attend school, ✓ Facilitating access to bursaries and scholarships for disabled learners as in most cases such learners are not considered. ✓ The MoE to ensure effective collection of up to data on the number of disabled children and type and form of disabilities to inform planning and effective inclusion of learners with special needs in the education programs. ✓ Based on the data, MoE to review its policies and guidelines so as to factor issues of disability issues. • The current unrest in schools has been attributed to the policy of no capital punishment in school as well as inadequate number of teachers to provide counselling support to students. This has led to a few students being taken to court and ultimately to jail, hence impeding learning and hindering their career development. To address, the following were recommended: ✓ Review the policy on capital punishment in schools with a view to documenting experiences, lessons learned and developing ways for disciplining errant learners; ✓ Provide more teachers in schools to offer psychosocial support to learners; ✓ Engage stakeholders such as gender and social protection department to widen provision of psychosocial support to students; ✓ Sensitize teachers on alternative forms of positive discipline whose uptake remains low; and ✓ Sensitize parents and caregivers on positive parenting and disciplining strategies. • Drugs and substance abuse and adverse impacts of tourism have affected schooling in coastal towns and along the lake shores. High poverty rate is among the main cause of

	learners engaging in sex tourism and drugs and substance abuse. The stakeholders identified enforcement of the Children Act as priority in addressing these social ills and recommended that: ✓ The MoE to work with the Ministry of Tourism to develop policies and measures to address sex tourism in hotels. ✓ Both Ministries to work with hoteliers to prohibit child sex tourism. • Prevalence of child and forced labour, which affects access to education: the stakeholders noted that child labour varies depending on the specific County's economic activities. Examples of child labor include engagement in economic activities such as gold mining in Siaya and Nariomoru in Turkana, boda-boda business, ferrying illicit brews, sand harvesting, farming, and fishing. All these have led to high school drop-out rates. Measures recommended to address this are: ✓ Develop a multi-sectoral approach in mitigating child laborur/forced labor. ✓ Enhance enforcement of the law on child labour related issues.

Potential Project Impacts

The Programme impacts and its significance during the construction and operation phases that have been identified and assessed in the ESIA include the following:

Table 2: Summary of Project Impacts and Mitigation Measures

Potential Environmental Impacts	**Mitigation Measures**
	Construction Phase
Positive Impacts	**Enhancement**
• Creation of employment opportunities for construction teams • Creation of market for supply of building materials • Increased business opportunities for small-scale traders such as food vendors and transportation activities, amongst others. • Knowledge and skills transfer	• Prioritize hiring of local laborers • Provide equal opportunity for women in all the 12 counties • Ensuring equal work equal pay for men and women • Ring-fence opportunities for supply of building material to local contractors • Trainee finalists from TVETS will be given opportunities to join the project as skilled and unskilled laborers
Construction Phase	
Negative Impacts	**Mitigation**
Impacts on loss of Vegetation (Vegetation Clearing)	• The contractors should avoid unnecessary clearing of vegetation by conserving vegetation in the sections not being built up, • The contractors should ensure no or minimal disturbance to the vegetation (shrubs) near the construction sites. • Restore vegetation in open sections at the end of the project
Soil Disturbance and Land Degradation	• The contractors will be allowed to disturb the soil at the exact location of the buildings • The disturbed areas round the buildings would be restored after completion. • The vegetation disturbed will be restored through planting grasses or trees in the open areas and parking areas for scenic views • Contractors are advised to use the locally sourced construction materials and avoid opening of new material sites to the extent possible, • Proper management of excavated spoil material to avoid dumping on un-designated areas. Re-use the excavated material/spoil for back filling and landscaping,
Increased Solid Waste Generation	• Regularly remove and transport the construction solid wastes to the designated waste disposal areas using NEMA registered waste handlers, • Provide waste bins for solid waste collection at strategic points for ease of disposing

	waste as the work progresses the construction sites • Construction workers to be sensitized on the importance of appropriate waste handling and disposal of all construction related waste in designated areas, • The contractors will keep records of waste disposal as proof for proper management of waste as designed, and • Spoil dumping should be carried out in designated sites away from water resources to avoid water pollution. Care should be taken to avoid spoiling in areas that could otherwise be considered productive.
Increased Liquid Waste Generation	• Provide workers with appropriate clean sanitary facilities which can be in the form of exhaustible mobile toilets. • Alternatively, effluent from mobile toilets should be disposed by a registered NEMA waste water handler. • All equipments must be fuelled at properly designated fuelling stations.
Increased Water Demand for sub-projects	• Contractors should use water bowsers and tankers to bring water for construction activities especially during periods of high-water demand such as concrete works. • Install a discharge meter at the outlet to monitor on water usage at the sites. • Install water conserving taps which turn-off automatically when water is not in use
Reduced Air Quality (air pollution/ gaseous emissions)	• The stockpiles of earth generated during construction works and areas used for handling fine construction materials should be palliated with water regularly in order to suppress evolution of dust • Construction trucks delivering materials to sites should be covered with tarpaulins in order to minimize spread of fugitive emissions to the surrounding areas; • No burning of materials should be permitted at the project sites; • Use clean energy to fuel project vehicles, equipment and machines in order to reduce air pollutants;
Risk of accidental Leaks and Spills	• Safety procedures for fuel storage and re-fuelling should be well understood and implemented by site staffs; • oil residuals including waste oil, lubricants, used filters, should be carefully collected and stored for safe disposal, in order to prevent spillover effects of contaminant hydrocarbons into storm water or groundwater resources; • Contractors will use drip trays to collect waste oil and lubricants from stationary plant such as generators or concrete mixers during servicing, • The contractors should have a spill prevention response procedure including all the

	necessary equipment and workers trained on management, • The contractors should immediately report to the site heads in case of any spills and/or accidental releases
Occupational Health and Safety Impacts	• Ensure the work places is registered with Directorate of Occupational Safety and Health Services (DOSHS) • Provide clean and acceptable sanitation and water facilities • Encourage tool box meetings on sites • The sites should have a functional grievance redress mechanism that allow workers to raise safety issues on site • Workers should be provided with suitable PPEs and enforce use • Scaffold used must be sound, rigid and sufficient to carry its own weight plus four times the maximum intended load without settling or displacement. • Barricade the active work sites to limit entry of unauthorized people such as use of scaffoldings, use of screens and nets to avoid flying debris and ensure good housekeeping at construction sites; • Trenches over 0.5m deep or wherever soil conditions dictate should be secured against accidental fall by workers and the public; • Install information and safety signage along the work areas;
Excessive Noise and Vibration	• Conduct periodic noise measuring and monitoring to determine levels and extent of harmful noise especially during borehole drilling • Clearly label the high noise areas and limit construction activities to daytime only (0800Hrs-1700Hrs). • Deploy machineries that creates less vibration and noise • Provide PPE (hearing protection) to persons operating within or visit identified high noise areas and machines. • Inform local residents when construction activities are likely to generate excessive noise in order to minimize disruption to local residents
Increased Energy Consumption	• Promote conservation of electricity used during the construction phase and operation phase – use energy saving bulbs for lighting, • The facilities designs should maximize the use of natural ventilation and lighting to the extent possible. • Liaise with proponent to apply for energy meters for use during construction to monitor

	on power consumption and keep records
Fire risks and hazards	• Hire competent and properly authorised electrical contractors to do the wiring and other electrical works • Provide fire extinguishers during construction work at strategic positions and ensure servicing is done and records kept, • Key construction workers staff shall have basic training in fire control, • Fire emergency telephone numbers should be displayed within construction areas
Increase in Food kiosks	• On-site kiosk services with adequate sanitation to be allowed within the project construction sites • The workers will have designated areas for eating and resting. • Only licensed vendors by public health will be allowed to operate food kiosks near the project site
Increased spread of HIV/AIDS	• Hiring workers from the local community to reduce the risks associated with labor influx; • Education and sensitization of workers and the local communities on HIV/AIDS and STIs • Provision of condoms to the project teams and the public, sensitization on importance HIV testing and adherence to use of ARVs • The contractors have to institute HIV/AIDS awareness and prevention campaign amongst workers and the local communities for the duration of the contract

Exposure Risks to Covid-19	▪ Use of face mask by all staff on sites ▪ Contractors should provide appropriate sanitation facilities including hand washing facilities (soap/ water) at site entrances and exits. Maintenance of basic hand hygiene by regularly washing hands with soap. ▪ Taking of body temperature of all staff and any other personnel visiting the sites. The temperature should not be above 38°C. ▪ Any individual with cough and have flue like symptoms of chest infections, illness such as fever, difficulty in breathing and sneezing with history of travel will be advised to go for assessment and prompt management. ▪ Under special instances and when unavoidable, meetings of 15pax or less can be held while observing social distancing, wearing of masks and use of sanitizers. ▪ Sensitize all community segments and project workers on Covid 19 and precautionary measures that need to be observed. ▪ Create awareness on project GRM to all community segments and project workers.
Labour Influx Related Impacts that comprise Gender-Based Violence (Sexual Exploitation and Abuse and Workplace Sexual Harassment), HIV/AIDs, substance abuse, crime etc.	• Prioritize the local skilled and unskilled labour within the project area during construction stages • Ensure that all workers have contracts with terms and conditions that are consistent with national labour laws and polices • Every worker should also sign a code of conduct (CoC) as an annex to the employment contract – covering issues such as zero tolerance of unacceptable conduct in the community, GBV, sexual harassment, sexual exploitation and abuse of children, etc • Facilitate formation of workers grievance redress through which their grievances will be received attended to or channelled to management. • Fair terms and conditions shall be applied for project workers (guided by relevant labour laws); • The project shall respect the workers' right of labor unions and freedom of association; • Ensure overtime is recorded and compensated in all the project sites. • Keep proper and updated records of the laborers on sites while avoiding child and forced labour; • Contractors to register workers with WIBA • Sensitize workers on HIV/AIDs and GBV/SEA-H risk and mitigation measures • Map all GBV service providers and document referral services for survivors.

	• Put in place security measures throughout the project cycle, to mitigate any insecurity risks (vandalism). • Ensure a functional and easily accessible project GRM is in place and and provides for confidential reporting of GBV cases. • Create awareness on project GRM to all community segments and project workers.
Child Labour Risks	• Keep an updated register of all employed staff in all the sites • All project sites to employ project workers who are 18 years and above, and with a valid national ID at the time of hire. • Ensure each worker signs a code of conduct covering issues such as zero tolerance to unacceptable conduct in the community such as abuse of children, GBV/SEA -H etc • Sensitize project workers on actual meaning and implication of the Code of conduct before signing it • Ensure no children are allowed on sub-project sites and put visible signage on site "**No Jobs for children**". • Put in place a GRM for project workers through which their grievances will be received attended to or channeled to management. • Create awareness on the sub-project policy regarding use of child labour to all community segments and project workers • Ensure a functional and easily accessible project GRM is in place • Create awareness on project GRM to community members and project workers. • Workers will be educated by relevant agencies such as police and probation officers on the relevant laws and polices protecting children • Reach out to children in and out of school in the vicinity of the construction sites with a life skills program focusing on HIV/AIDS and sexual abuse prevention among others areas • Strengthen school based and school led life skills programs targeting any schools near construction sites • Reach out to school authorities and parents near construction sites on paying special attention to child protection in light of labour influx • Partnerships will be established with relevant government agencies and NGOs to ensure children access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary • Ensure no children are employed on site in accordance with national labour laws

Gender Based Violence (GBV), Equity, Rape and Sexual Harassment	• Ensure that women are given adequate employment opportunities during recruitment and job postings • Regular sensitization and awareness campaigns to the workers should be done to promote gender equity in employment during the construction works and during operation. • Provision of gender disaggregated data, separate bathing, changing, sanitation facilities for men and women • Impose zero tolerance on sexual harassment, all forms of gender-based violence and discrimination at all phases of the project • Contractors to prepare and enforce a No Sexual Harassment Policy in accordance with national laws where applicable. • Identify and map out all the GBV service providers (referral pathways) and provide support to ensure survivors access such services with ease. • Impose zero tolerance on all forms of gender-based violence including sexual exploitation and abuse and sexual harassment and discrimination at all phases of the project. And ensure workers sign a Code of conduct prohibiting all forms of GBV.SEA-H • Sensitize project workers on actual meaning and implication of the Code of conduct before signing it • Ensure visibility of signage and information, education and communication materials on such GBV issues issues in construction sites. • Sensitize workers on HIV/AIDs and GBV/SEA-H risk and mitigation measures • Map all GBV service providers and document referral services for survivors. • Put in place security measures throughout the project cycle, to mitigate any insecurity risks (vandalism). • Ensure a functional and easily accessible project GRM is in place and and provides for confidential reporting of GBV cases. • Create awareness on project GRM to all community segments and project workers.

Impacts on Cultural Heritage / Archaeological Interest / Existing Ecologically Sensitive Areas	• Identify and document all physical cultural resources present in the sub-project site, in consultation with all community and stakeholders • Seek alternative appropriate sub-project sites and designs to avoid any damage, relocation or restricting access to physical cultural resources. • Avoid or minimize the clearing of indigenous vegetation/ trees with significant cultural importance to pave way for the construction of a subproject • The Project should align with national guidelines on Chance Finds Procedures as provided in annex IV and adhere to the recommendations provided by relevant government agencies
Increased Insecurity Concerns	• The contractors should explore on the possibilities of having a different access to be able to enhance security and differentiate between visitors and workers accessing the site. • The contractors, in conjunction with the management, should hire more security personnel and ensure they are well inducted to address security related issues as they arise. • Contractors to liase with institutions and local leadership when recruiting local workers • Limit worker's interaction where possible with community members, and institution staffs and trainees • Provide sanitation facilities including toilets and water to the workers to prevent complaints emanating from community shared water point. • Contractors security personnel should sign the Code of Conduct that discourages the use of force unless for defensive purposes • Sensitize project workers on actual meaning and implication of the Code of conduct before signing it • Discourage any form of bad behavior and ensure discipline is maintained during the construction hours., • Ensure all workers sign the code of conduct
Alcohol and Drug Abuse	• During workers' orientation, they should be clearly informed of no drug or alcohol abuse within the construction site and during working hours • The supervisor should not allow any worker entry to the construction site who is under the influence of drugs or alcohol. • Contractors to establish a designated smoking zone • Provide posters sensitizing workers on the dangers of alcohol abuse

	• Contractor security personnel should sign the Code of Conduct that discourages the use of force unless for defensive purposes • Sensitize project workers on actual meaning and implication of the Code of conduct before signing it
Grievance Arising from Construction Activities	• Put in place a workers grievance redress mechanism e.g., o Assigning a contractor based GRM Focal Person o Putting in place channels to allow people complaint- e.g., Telephone, Email, registers, What's up platform for workers, suggestion box among others o Ensuring documentation of all complaints in the complaint's registers o Ensure that all complaints are addressed in a timely manner o Refer all unresolved grievances to the 1st Tier/Level of the project GRM o Report on all the grievances received and processed to the project GRM focal person on a monthly basis • Raise awareness to all stakeholders including project workers on the project GRM • Resolve complaints within the project timeline (acknowledging within 7 days and resolving within 21 days or as soon as possible (within 24 hours for GBV/SEA complaints) • Ensure the project GRM is functional, and accessible to both project workers and all stakeholders • Create awareness to all stakeholders and project workers on project GRM • Ensure all reported grievances are logged, dated, processed, resolved and closed out in a timely manner. • Ensure the GRM provides for confidential reporting of particularly sensitive social aspects such as GBV, as well as anonymity for those who wish to report anonymously.
Inaccessibility of project benefits Sub-projects constructed are not disability and elderly sensitive	• Undertake timely and prior disclosure of relevant project information to all community segments • Ensure adequate and ongoing consultations based on a pre-agreed consultation plan • Ensure user-friendly subprojects for PWDs and the elderly, in consultation with all community segments. • Ensure a functional and culturally appropriate GRM is in place and accessible. • Create awareness on project GRM to all community segments and project workers
Incomprehensive monitoring project ESMP	• Ensure all social risks and impacts are monitored, including specific activities and processes such as stakeholder engagement and grievances management, • Ensure a functional and easily accessible GRM is in place

The monitoring process inadequately capturing social risks and impacts associated with the project	• Create awareness on project GRM to all stakeholders and project workers.
Operation Phase	
Positive Impacts	**Enhancement**
• Employment opportunities contribution of revenue to the national and county government • More learning facilities for the proponent • Employment opportunities at the infrastructure components • Increase in the accommodation facilities for learners at institutions	• The institutions should ensure that they abide with all labour legislation and provide an equal opportunity to all Kenyans without any form of discrimination. • Ensure that the local communities are given priority in relation to employment within the cadre of unskilled labour • Ensure that all workers have contracts with terms and conditions that are consistent with national labour laws and polices • Facilitate workers to form a committee through which their grievances will be received attended to or channelled to management • Establish market trends and demands to optimize on the output consumption • The institutions should develop and offer courses that are demand-driven • Safe and affordable accommodation should be prioritized to create a conducive learning environment. If more space is required liaison with private neighboring facilities can be sought on behalf or by the students themselves.
Negative Impacts	**Mitigations**

• Increased levels of water use • Increased waste water generation • Increase in a lot of Solid waste generation • Increased levels of energy consumption • Increase in labour disputes • Risk of sexual exploitation and abuse • Security concerns and conflicts due to admission of new learners and staffs to the institution. Nat	• Sensitize the institution fraternity on the need for water saving through signages such as "close taps after use", environmental clubs, participation in environmental activities, awareness creation talks and seminars • Ensure that no grey water run-off or uncontrolled discharges leave the site or working areas to adjacent water resources. All the general effluent to be generated will be handled by proper closed drainage systems • Ensure proper handling of lubricants, fuels and solvent while maintaining the equipment • Ensure that the solid waste collection, segregation, and disposal systems are functioning properly and well scheduled • Recycle and re-use wastes where possible such as scraps metal. • All hazardous waste to be collected and disposed by licensed waste handlers • Effective community engagement and strong grievance mechanisms on matters related to labour through Grievance Redress Mechanism (GRM) • Institution management to continue and bolster existing measures in place to reduce the spread of Covid-19 such as screening at the entrance, temperature monitoring, provision of adequate wash points, enough signages such as social distance, masks wearing at all times among others in line with the Ministry of Health protocols

TOTAL FOR ESMP Implementation is **USD 83,000**

Environmental and Social Monitoring Plan

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	Cost (USD)
1	General impact issues	Clearly set out environmental and social requirements within tender documentation and include EHS scoring within selection criteria.	Before tender document advertisement	EHS requirements	One-off	NACONEK	5,000
2	General impact issues	Contractor required to develop and implement a Construction Environmental Management Plan (CEMP) meeting the conditions set out in the environmental authorization, as well as this ESIA and Bank requirements.	Before tender document advertisement	Contractor provides CEMP	One-off	Contractor	7,500
3	Water quality	Do not dump any construction waste material in water bodies. Avoid, if possible, chemical fertilizer pollution by use of organic fertilizers for small farms Regularly maintain Programme equipment to avoid leaks and spills Do not undertake maintenance near a water source Do not dump waste material into a River or Land Locate contractor camp sites, waste disposal and spoil dumping areas away from water sources	During Programme construction phase	Visual audits/spot checks Good housekeeping at the Programme site Well drained Programme site Areas used for temporary construction activities fully restored	Weekly	NACONEK/ Contractor	6,500
4	Water availability	Plant grass species especially of indigenous origin along the irrigation channels Select water abstraction points based on a hydrology study Obtain permits from WRMA prior to water abstraction and observe the conditions therein Avoid abstracting water from points used by the local community members.	During Programme implementation/activities	Records of water utilisation No recorded incidents or grievances to surrounding water users	Daily	Contractor	5,500

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	Cost (USD)
		Only extract the water quantities that are needed to meet the Programme requirements. Monitor the water levels during water abstraction. If the water levels are lower than expected, an alternative location should be identified. Schedule the water abstraction activities to avoid the times of the day when the affected community members need it more Install water storage tanks especially at schools to store water for future.					
5	Noise (and vibration) environment	• Limit construction activities to school off time only. • Share the construction schedule with all the affected stakeholders indicating period when un-usual construction activities with extraordinary noise levels will be conducted. Share construction schedule with all the affected stakeholders Inform the neighbouring communities of any unusual activities with extraordinary noise levels including time, expected duration and any safety precautions. Provide all construction workers with relevant PPE at all times while at work and enforce application. Construct an enclosure wall of noise generating permanent infrastructure eg watergen, food processing centre Construct waterway 300 m away from residential area	During construction and operation phase	No recorded incidents or grievances to surrounding community Noise monitoring records	Monthly	NACONEK/ contractor	5,500

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	Cost (USD)
6	Soil	Enhance positive impacts Use organic fertlisers to enhance soil quality and compact soil to avoids erosion Plant Vetiver grass in across the water abstraction channel every 4m Transfer top 30 cm deep excavated soil and use for gardening. Use excavated soils below 30cm which are not fertile for road construction Layout soil conservation measures that include countour vetiver grass strips, countour earth bunds or contour stone bunds depending on available materials. Apply an integrated soil amelioration interventions that include the use of lime and organic fertilizers.	During Programme construction phase	Visual audits/spot checks Programme activities limited within Programme footprint Areas used for temporary construction activities fully restored	Monthly	NACONEK/ contractor	3,000
7	Air quality	Issue all the Programme workers appropriate PPE Maintain all the construction equipment and vehicles as per the manufacturers' instruction to avoid unnecessary emissions of excess exhaust gases. Prevent unnecessary idling of Programme equipment and vehicles	During Programme construction and operation phase	No recorded incidents or grievances to surrounding land users Records of audits/visual inspection	Daily	Contractor	5,500
8	Flora	Removal of vegetation should be on an as needed basis Limit vegetation clearance to areas within the Programme footprint. No interference with vegetation or other natural features outside the Programme footprint area	During Programme construction and operation phase	% of Programme cleared/used area to vegetated area Restoration audits and monitoring	Monthly	NACONEK/ contractor	2,500

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	Cost (USD)
9	Wastes and effluents	Preparation and implementation of a Waste Management Plan (WMP). waste minimisation at source, segregation for reuse, recycling, and safe disposal of waste. Use applicable law on waste water regulation (2016) and e-waste regulation e-waste generated should be disposed of on pre-identified and approved locations The use, storage, transport and disposal of hazardous materials used for the Programme will be carried out in accordance with all applicable Kenyan regulations The sewage/waste water will be treated in accordance with the applicable laws	During Programme construction and operation phases	An effective WMP in place Records of audits/visual inspection	Monthly	Contractor/NACONEK	2,000
10	Employment/procurement/economy	Prioritise the employment of unskilled labour from the local communities where feasible Develop a fair and transparent employment and procurement policy and process that manages out any potential nepotism and favouritism. The Programme should prioritise the procurement of goods and services from the local communities Prioritise the procurement of goods and services from within the Programme counties. Procure locally available materials where feasible and use local suppliers where appropriate.	During Programme construction and operation phase	Requirements for local employment included in contract established with the Contractor. Employment records	Preparation of guiding documents prior to construction Employment records checked monthly	NACONEK/ contractor	8,000
11	Impact on Labour	The Programme should develop and implement an Occupational Health and Safety Management System. This	During construction	Employment records and other KPIs for worker rights	Monthly	NACONEK	10,000

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	Cost (USD)
	and working condition	systems should include use of Personal Protection Equipment (PPE), Develop a HR Policy and Labour & Employment Plan (LEP), including worker Grievance Mechanism Ensure contracts abide by Kenyan Labour Laws/ International Best Practice /AFDB Bank Standards	and operation phase	A record of workers' grievances			
12	Impacts on cultural heritage	Preserve chance finding	Construction phase	Chance finding	During project implementation	NACONEK	1,000
TOTAL				**USD 62,000**			

On the strength of table 2 above, it is hereby recommended that the project be granted the required approval and an EIA license as appropriate. Detailed mitigation measures for all the potential impact are provided under chapter 7 and the monitoring plan have described under chapter 8 (ESMP).

Project Implementation and Monitoring arrangements of this ESIA

The primary role of monitoring and supervision of the project's environmental and social compliance falls in the ambit of Ministry of Education and The National Council for Nomadic Education in kenya (NACONEK) since they are the implementing agencies. Support and secondary roles from other entities is outlined in detail in chapter 8 of the report.

Key players in the monitoring of compliance in the project will include:

i. NACONEK (E&S Specialist, Programme Implementation Unit)
ii. Ministry of Education (State Department of basic education)
iii. County staff that will include:
    - County Director for Environment
    - County Director for Physical Planning,
    - Labour Officer
    - Community Development Officer
    - Physical Planner
    - Public Health Inspector
    - Occupational Health and Safety Officer

ESMP Implementation Budget

It is estimated that the ESMP implementation budget will be approximately **USD 145,000** divided into three phases i.e., construction, operation and decommissioning

Activity	
Environmental and Social management Plan implementation	**USD 83,000**
Envronmental and Social Monitoring Supervision implementation	**USD 62,000**
Total	**USD 145,000**

Conclusion

i. Through the ESIA process, which included various stakeholder input, the Consultant has identified and assessed a number of potential impacts relating to the Programme activities. The implementation of the mitigation measures in the ESMP will provide a basis for ensuring that the potential positive and negative impacts associated with the implementation of Programme activities are enhanced and mitigated to a level which is deemed adequate for the Programme activities to proceed.
ii. The project will have moderate environmental and social concerns as the risks identified are site specific, and manageable.
iii. The positive impacts of the project outweigh the negative ones, which will be adequately contained by following the prescribed environmental and social impact management and monitoring plans.
iv. The proposed project is necessary to help in providing equity in access to education in ASAL and address in poverty impacts.
v. As such, the projects should be licensed and disclosed to allow commencement of the next phases of construction, operation and decommissioning, and activities carried out in compliance with the ESMP and sound environmental and social management

practices that are locally and internationally recognized.

Recommendations

This assessment provides the following.

1. The mitigation measures for management of Environment, Social Health and Safety concerns as provided in the Environment and Social Impact Assessment and Mitigation Plan - ESMP should be adhered to.
2. The contractors to prepare and implement a site-specific Construction Environment and Social Management Plan (C-ESMP), within 14 days of contract signing.
3. The contractor will engage on a full-time environment, social safeguards, gender-based officer and health and safety officer who will be in charge of ensuring compliance of the contractor to environment and social provisions provided in the ESIA report and Construction Environment and Social Management Plans (C -ESMP) prepared by the contractor. The officer will participate in monthly and quarterly meeting and will generate monthly and quarterly environment and social safeguards compliance reports. The contractor will also recruit a community liaison officer who will act as a link between the community and the contractor.
4. The proponent will ensure compliance with the relevant policies, legal frameworks and regulations applicable to the project as described in this report.

CHAPTER ONE

1.0 INTRODUCTION

1.1 General Overview, Justification and Rationale for ESIA

The *National Council for Nomadic Education in Kenya* (NACONEK), programme proponent is mandated to ensure provision of quality education in nomadic regions which are lagging behind due to myriads of challenges such as; prolonged drought, conflict and insecurity, retrogressive cultural practices, low economic and education outcomes among the community they serve.

The IMPReSED programme is grounded on the Government's National Education Sector Strategic Plan II (NESSP II), 2022 - 2026. The government's programme includes four themes that are critical for addressing inequities in access to quality basic education: i) access and participation; ii) equity and inclusiveness; iii) quality and relevance; and iv) governance and accountability.

The key development partners (DPs) supporting education in the ASALs include the AfDB through TVET, World Bank financed USD 1 billion North & North-eastern Development Initiative (NEDI) Programme which cuts across different sectors; Global Partnership for Education (GPE) on primary education; UNICEF's programme dubbed *'operation back to school phase II'* which targets 200,000 out of school children (OOSC) in 16 counties in ASALs; the Foreign Commonwealth Development Office; and the World Food Programme on nutrition. The proposed Project will work in collaboration with the partners, particularly UNICEF and GPE to ensure complementarity rather than duplication.

The Integrated Mechanisms for Poverty Reduction Sustainable Education and Development (IMPReSED) is a five-year USD 50 million Programme that seeks to address equity in access to education in the Arid and Semi-Arid Lands (ASAL) and urban informal settlements, address barriers to education such as poverty and migration exacerbated by climate change impacts, address barriers to education and to increase enrollment, retention, progression and completion among out of school going children (OOSC) and youth in at least 10 counties out of the 12 counties under NACONEK mandate.

Specific project objectives are:

- To increase access, quality and retention of 455,000 OOSC in basic education and integrated TVET programs;
- To increase access to skills development and employability for 5000 unemployed youth; and
- To promote sustainable and resilient livelihoods for households with OOSC and youth.

The 12counties targeted are categorized as follows:

- 7 in the Arid & Semi-Arid Lands (ASALs) that include; Samburu, Mandera, Wajir, Garissa, Marsabit, Makueni, Kilifi;
- 4 Pockets of poverty counties that include; Siaya, Bungoma, Homabay and Machakos
- 1 in the urban informal settlements that include; Nairobi

The IMPReSED Programme has been informed by *NACONEK Integrated Water Food and Energy Solutions for Schools* – NIWFESS framework – that has had a lot of success in its pilot

School at Kuno Primary School in Balambala Garissa County whose aim was to provide a home-grown food solution to enhance access, retention, progression, and completion of education for school going solution. The IMPReSED comes in as a scale-up and to address a community approach aspect that was not addressed by NIWFESS.

NACONEK's IMPReSED integrated Programme proposal seeks:

- to sustainably address poverty as a key barrier to meeting the indirect cost of education and nutrition needs of OOSC and youth,
- to improve access to water and sanitation facilities in schools,
- to improve access to pasture to reduce conflict and migration of children,
- to improve quality of education to meet the needs of OOSC and youth,
- to integrate ICT and infrastructure development,
- to enhance the capacity of the local community and schools to produce local foods for their consumption and market,
- to enhance resilience and adaptive capacity of communities to the impacts of climate change in ASALs and
- to increase youth employment

1.2 Proposed Infrastructure Project Objectives

The main objective of this ESIA assessment was to establish the baseline conditions of the proposed site, evaluate the existing and the anticipated impacts and propose measures to enhance the positive impacts and measures to attenuate the effects of the significant negative impacts as a result of the proposed construction activities. The programme infrastructural activities that are likely to have environmental and social impacts are:

1. Integrated Water, Sanitation and Hygiene (WASH) to ensure water for mini-irrigation and drinking water are available. The activities will be implemented in institutions (schools and TVETs). Specific activities include:
    - Construction of ponds (truncated, sausage and pyramid tanks/ ponds) which are less than four million litres capacity;
    - Construction of boreholes
    - Reverse osmosis of water from boreholes;
    - Shallow wells, riverine boreholes and ground water dowsing.

2. Integrated Food security program. Specific activities include:
    - Micro-irrigations (2-10 acres in selected schools) and kitchen gardens to establish school farms for local food production & development;
    - Pasture for Access under sustainable livelihoods;
    - establishment of *Gliricidia Sepium*, sunflower, and water melon farms that will be managed by a school committee and monitored by the NACONEK focal point for food
    - Link to Established MSEA sites and rehabilitate site to link community to value addition and market for food security and malnutrition components.
3. Integrated Clean Energy Programme to ensure reduced use of firewood and charcoal in Institutions (schools and TVETs). Specific activities include:
    - Solar energy (for solar pumping of water, lighting and charging of appliances); and
    - Bio-energy (*Gliricidia* briquettes)
    - Instalation of clean cooking systems with Steam cooker or energy saving jiko

- Instalation of clean food storage with silos

4. Institution (schools, TVET) infrustructure improvements. Specific activities include:
    - Fencing; and
    - Class rooms renovations and bathrooms
    - Establishment of sanitation blocks

5. Upgrading ICT infrastructure for offline blended learning and digital resource centers. Specific activities include:
    - Establishment of micro innovation hubs.

1.3 Terms of Reference (TOR)

The primary objective of the consultancy is to undertake an ESIA of the proposed construction activities in the five components above. The terms of reference of this ESIA are:

i. To identify and assess potential positive and negative environmental and social impacts associated with the proposed civil works in sanitation blocks, classrooms and fencing and installations of clean cooking systems, clean food storage with silos
ii. To recommend appropriate environmental, social, health and safety mitigation measures for integration and rehabilitation works in all phases of the project's cycle
iii. To determine how far the activities that relate to reverse osmosis from boreholes, Bio-Energy, Micro irrigation and kitichen gardens and their operation comply with sound environmental health and safety management practices
iv. Undertake project alternative analysis
v. Conduct a public consultation process in conformity with the provisions of the Constitution of Kenya (2010), the EMCA (2015), the EMCA (Environmental Impact Assessment and Environmental Audit) Regulations and the Legal Notice Number 31 and 32 of 2019
vi. Generate an Environmental and Social Management and Monitoring Plan (ESMMP) that describes in detail the mitigation measures to be carried out, scheduling and responsibility of such measures, and a detailed monitoring process and its schedule
vii. Prepare an ESIA report compliant to the requirements of the relevant authority

1.4 Scope of ESIA Study

The study has been conducted as per the above TOR and as set out in national environmental management framework and specifically the EMCA, 1999, amended in 2015 and the Environmental (Impact Assessment and Audit) Regulations, 2003. As well as the African development (AfDB) safeguard policies and the ESHS guidelines. These frameworks set the requirement for evaluation of the potential environmental and social risks and impacts of the project, generation of baseline information evaluation and recommendation of the best alternatives from the options available (if any), the nature, order of magnitude, extent, duration and reversibility of the potential changes. The geographical scope is limited to the direct and indirect physical extent as may be likely affected by the proposed project.

Through ESIA, the client is also required to conduct public participation and stakeholder consultation to inform and obtain the views of stakeholders about the proposed projects and associated activities in order to provide meaningful input into the project design and mitigation measures. Such information should be disclosed in a; timely manner, accessible place, form

and language understandable to project-affected parties and other interested stakeholder. The underlying key principles of ESIA are that every person is entitled to a clean and healthy environment and that every person has a duty to enhance and safeguard the environment.

1.5 Methodology

The ESIA was based on site visits, literature review, and discussions with the project proponent Programme management unit, County and Environment departments, Local Administrators and consultation with the public (Consultation and Public Participation -CPP). While preparing the ESIA report, care was taken to identify the potential negative impacts and their mitigation measures in terms of:

i. Impacts due to project location;
ii. Impacts from project design and during construction;
iii. Impacts during the operation phase of the project; and
iv. Decommissioning phase of the project.

For the purpose of the assessment and preparation of the ESIA project report, the following approaches and methodologies were employed:

1. ***Screening:*** The proposed Programme was screened to determine the need to undertake an ESIA based on:
   ii. Programme characteristics;
   iii. The Second Schedule of EMCA, which lists the activities that must undergo an EIA; and
   iv. African Development Bank Operational Safeguards

The Consultant also carried out an initial Programme activities sites reconnaissance. The purpose of the site visit was to familiarise the Programme Team with the Programme Area and to collect primary environmental and social baseline data. Based on the above criteria, it was concluded that an ESIA would be necessary for the proposed Programme due to the following aspects:

- LN No 31 of April 2019 on the EMCA which provides for an EIA of low and medium risk activities. The IMPReSED Programme activities fall within the category of low and medium risk activities and an EIA therefore is mandatory; and
- The nature and extent of the potential impacts of the Programme.

2. ***Desktop studies*** which involved review and analysis of literature (project documents, design layout and specifications, legislative framework) for acquisition of secondary data;
3. ***Environmental scoping*** that provided the key environmental and social issues to be investigated in relation to implementation of the proposed programme;

The objectives of the Scoping Study were to identify the potentially significant environmental and social issues relating to the Programme that will need to be addressed as part of the ESIA. Therefore, the following activities were undertaken:

- Identification of sources of data on baseline conditions. A review of the entire relevant and current baseline studies conducted that informed the design of this Programme was analyzed. Ongoing pilots that have been used for research and evidence-based approach to policy and programme development were visited and consulted by the technical team which include: 1) the NIWFESS framework and Kuno Pilot in Garissa, 2) the Model Cross-border Peace School in West Pokot, 3) the ongoing Refugee Programme 3) Socio-economic school and community pilots in Kangemi, Laikipia, and Kilifi 4) the MSEA partnership with 12,000 outgrowers in Bungoma for school ready to drink

porridge as a homegrown solution 5) the green energy for cooking programme in Garissa, Tana River, Kilifi and Kwale for steam cooking, energy saving jikos and use of briquettes.

- Determination of the likely areas of influence to be considered in the ESIA;
- Consideration of alternatives related to the Programme;
- Identification and consultation with stakeholders who would be interested and/or affected by the Programme;
- Identification of cross-sectoral issues and impacts, prioritising them on a shortlist which would need to be considered as part of the ESIA; and
- Defining the environmental and legislative setting of the proposed Programme

4. ***Physical inspection*** of the site characteristics and environmental status of surrounding areas; Detailed site investigations were then undertaken during which further stakeholder engagement was undertaken and primary environmental and social data was collected through:

- A number of stakeholder meetings (including public meetings/*barazas*);
- Key Informant Interviews (KII);

5. ***Photography and Global Positioning Systems (GPS)*** were used to record the salient features and baseline conditions in the Programme sites and their surroundings. The photos were used to define existing features in the Programme Area and identify soils and floral species. Photography was combined with transect walks and used to identify possible impacts of the proposed Programme. All the relevant images were stored and are attached to this Report.

- ***6. Impact Assessment Methodology:*** The purpose of impact assessment and mitigation is to identify the significant potential impacts on identified receptors and resources according to defined assessment criteria and to develop and describe measures that will be taken to avoid or minimise any potential adverse effects and to enhance potential benefits.
- ***7. CPP*** to get input into the project activities/risks/impacts;
- Identification of potential environment and social impacts and preparation of an ESMP; and
- ***8. Reporting.***

1.6 Consultation and Public Participation

CPP was done with involvement of stakeholders within the Project Area of Influence (PAI). This provided the stakeholders an opportunity to share their views as well as concerns with regard to the proposed project for better planning.

This was done in conformity with the provisions of the Constitution of Kenya (2010), the EMCA (2015), the EMCA (Environmental Impact Assessment and Environmental Audit) Regulations and the Legal Notice Number 31 and 32 of 2019, that all demand for public engagement prior the implementation of a project such as the one being assessed.

CHAPTER TWO
2.0 PRORAMME LOCATION, DESCRIPTION AND ACTIVITIES

2.1 Introduction

This *Chapter* provides an overview of the proposed Programme. Programme activities and requirements for the construction, operation and decommissioning of the Programme activities are discussed in the following *Sections*. The programme has some soft activities with no environmental impact and some infrastructural activities with likely environmental and social impacts. The ESIA will focus on the infrastructural activities with likely environmental and social impacts.

The Integrated Mechanism for Poverty Reduction for Sustainable Education and Development (IMPReSED) is a multi-sectored programme that will support the government's strategy in National Education Sector Support Plan (NESSP). The objective of IMPReSSED is to ensure equitable access to quality education opportunities for out of school children (OOSC) in Kenya, strengthen quality and relevance to learning for the primary school children, improve educational service delivery, increase learning opportunities and skills training for youth in the ASALs and Urban informal Settlements.

The financing by a co-financing hybrid of The Government of Kenya, African Development Bank (AfDB) and other development partners of a total of US$ 50 million for the IMPReSED programme will be for a period of 5 years from the date of approval of the operation.

IMPReSED is also informed by lessons learnt from previous and ongoing programmes which are:

- An ongoing pilot in Garissa, whose aim was to address impacts of climate change and poverty in order to provide a conducive learning environment;
- Ongoing homegrown solution pilots in Bungoma, Laikipia, Nairobi and Kilifi;
- The National Programme Operation Come Back to School in partnership with Education Above All (EAA) and UNICEF;
- The Cross-border Model Peace School Programme in West Pokot with UNDP; and
- The Improving Social and Economic Opportunities for Youth Programme recently completed with Aga Khan Foundation in Kilifi and Kwale.


SCHOOL FARMS: Trees, grass, food crops

WATER: Truncated Pond

VALUE ADDITION: Honey

GREEN ENERGY: Steam Cooker

MICRO INNOVATION HUB: Offline Resource Center

2.2 Programme Justification

Impacts of climate change have had their highest effects on ASAL schools in Kenya, disrupting access to education. Seasonal crop failure, livestock starvation, depletion of water (water pan dry-ups) and loss of vegetation cover (biomass loss), intense heat and strong dry hot winds, droughts and spread of desertification were some of the immediate impacts of climate change. Disruption took the dimension of climate change induced refugee migration in search of water, food, pasture and shelter. Migration flow is both throughout the ASAL regions and across the country into Somalia and Ethiopia where the situation is not in any way better if not worse.

In over one-half of Counties (25 out of 47 counties), more than 20% of pre-primary school-age children of 4 to 5 years old were out-of-school in 2019. Some of the most marginalized counties – Mandera, Wajir and Garissa recorded out-of-school rates exceeding 80% for children in this age group. In 10 out of 47 counties, out-of-school rates for primary school-age children (6 to 13 years old) were above the national average of 11% and in 11 out of 47 counties, out-of-school rates for secondary school-age learners (14 to 17 years) were above the national average of 14%.

For example, slightly more than one-third of those aged 6 to 13 years were out-of-school in Isiolo (34%) and Tana River (33%). More than 60% of those aged 14 to 17 years old were out-of-school in Turkana (65%), Wajir (69%), Mandera (65%). Garissa County registered the largest magnitude of 14- to 17-year-olds that were not in school (72%) compared to any other county. Many children, adolescents, and youth are not only likely to enter the education system later in life, but will be over-age for their grade when they initially access school.

Assessments carried out on the situation of OOSC in counties located in ASAL region and select non-formal settlements in Kenya reveal myriad barriers affecting the efficient engagement of children in education. For example, lower completion and learning outcomes in ASAL counties is often linked to conditions such as "hidden hunger" due to inadequate nutrition, poverty, mismatch between mainstream schooling designed for "sedentary" learners and nomadic lifestyles, distance to school in sparsely populated counties where adequate facilities are also limited, insecurity, natural disasters and climatic shifts that may force school-age children to abandon school in search of water to sustain nomadic lifestyles. Drug Substance abuse, early marriages, insufficient learning materials, unaffordability of fees and uniforms, high turnover of teaching staff in areas with heightened insecurity and congested classrooms also inhibit school attendance as well as travelling long distances to school (NACONEK-NIWFSS,2020, UNICEF, Educate a Child 2018)

Congestion in classrooms is also a key barrier to learning especially in COVID-19 epidemic era. By 2019, pupil-teacher ratios (PTR) in public pre-primary schools in Isiolo, West Pokot, Turkana, Samburu, Marsabit and Mandera had worsened in the last 5 years since 2014 signaling insufficient deployment, retention of teachers in these locations with the potential to influence parents' decisions to restrain younger children from attending school. In these counties, PTRs for public primary schools ranged above 50 while 80 and 73 students per teacher (compared to the national average of 37) were recorded in Turkana and Mandera counties, respectively, by 2019[1] (MOE, 2019).

In this regard, NACONEK proposes Integrated Mechanisms of Poverty Reduction for Sustainable Education and Development (IMPReSED). The Programme seeks to sustainably address poverty as a key barrier to meeting the indirect cost of education and nutrition needs of OOSC and youth, access to water and sanitation facilities in schools, access to pasture to mitigate conflict and migration of children, quality of education to meet the needs of OOSC and youth, ICT integration and infrastructure development, enhancing the capacity of the local community and schools to produce local foods for their consumption and market, enhancing resilience and adaptive capacity of communities to the impacts of climate change in ASALs and youth employment.

2.3 Programme Location

The programme targets 12 counties under the mandate of NACONEK. The twelve counties for this programme are Samburu, Mandera, Wajir, Garissa, Marsabit, Kilifi, Bungoma, Siaya, Homa Bay, Makueni, Machakos and Nairobi.

Criteria for choosing the 12 Counties for this programme are based on the following considerations:

[1] For public secondary schools, Turkana located in Arid areas registered PTR of 39 in 2019, above the national average of 31

- **Education:** Access, Gross Enrolement Ratio/Net Enrolement Ratio (GER/NER) (OOSC), Performance, School density, Parent Teacher Ratio (PTR), ender Parity Index (GPI), security, completion and transition;
- **Socioeconomic:** Poverty Index, Distance, Population density, area security, community consent of land usage, willingness and consent to participate in the programme, other multispectral interventions, coordination and approval by Ministry of Interior, Ministry of Health, Ministry of Youth and Gender, other agency interventions to coordinate with such as Community Based Organisations (CBOs), Non-Governmental Organisation (NGOs), United Nations (UN) Agencies;
- **Biophysical:** Water availability and accessibility, other multisectoral interventions, coordination and approval by Ministry of Agriculture, Ministry of Water, Kenya Forestry Services; and
- **Harmonization and Linkage to ongoing relevant projects: Porridge for schools innitiative:** Bungoma, Nairobi, Isiolo, Garissa, Wajir implement porridge for schools' initiative.
- **Harmonization to National Projects:** LAPSSET Project- the new roads constructed in the North will facilitate linking livestock and other agricultural products to market.

The 12 counties targeted are categorized as follows:

- 7 in the Arid & Semi-Arid Lands (ASALs) that include; Samburu, Mandera, Wajir, Garissa, Marsabit, Homa Bay and Makueni.
- 4 Pockets of poverty counties that include; Kilifi, Siaya, Bungoma and Machakos.
- 1 in the urban informal settlements that include; Nairobi

Programme infrastructure activities and locations

In the Table below 2.1 is the Programme counties, institutions, locations and infrastructure activities with likely environmental and social impacts.

Table 0.1 Summary of Activity Types, Counties and Number of Institutions

	County	Learning Institutions	Coordinates	County Baseline Summary (Average)
1	Marsabit	Dukana Girls Primary	2.337843°, 37.991607°	The learning institutions in Marsabit belong to rural pastoralist communities. The topography of the area is 75% flat. About one quarter of the area has 30% grass cover while a half of the area has 50% sparsely populated indigenous tree cover. The total land size for all the four institutions of Marsabit county within the IMPReSED programme is 72 acres. Three of the institutions have a fence with a gate. Most classrooms are in good condition. The four learning institutions have a total of 29 classrooms, 8 dormitories and 2 dining halls. The institutions have 27 TSC teachers and a total enrollment of 1427 learners (201 boys and 1226 girls) out of which 20 are PWDs. In respect to social amenities, lunch is provided to all students while 952 reusable sets of dignity packs are provided to girls annually. 50% of the schools have no water source at all while the remaining depend on boreholes and rainwater harvesting. Institutions lack adequate water. The cost of water per term is generally more than KES. 20,000/-. All the four institutions have a total of 34 latrines 50% of which are gender segregated. In terms of energy, 75% of the institutions have access to electricity that is more often available. However, they depend entirely on firewood for cooking.
		Segel Primary School.	3.322623°, 37.072309°	
		Helmer Memorial Girls Primary School	3.312699°, 37.057312°	
		St Theresa's Girls Boarding School	2.3274633989832076, 37.987107	
		Saku VTC	**2.287571°, 38.084838°**	
2	Mandera	Fincharo Primary	2.926767°, 40.505349°	Learning institutions in Mandera are located in an area of rural pastoralist communities. The topography of the area is 50% flat. About a quarter of the area has 30% grass cover while three quarters have 50% sparsely populated indigenous tree cover. The total land size for all the four institutions of Mandera county under the IMPReSED programme is 92 acres. Two of the institutions have a fence while three have a gate. Most classrooms are in good condition. The four learning institutions have a total of 33 classrooms, 2 dormitories and 2 dining halls. The institutions have
		Mado Primary School	3.973086°, 41.113808°	
		Chief Dahir Arab Primary School	Latitude: 3.95897N3° 473.2382 Longitude: 41.14025 E41°8’24.894”	

		Mandera Technical Training Institute	**3.973086°, 41.113808°**	16 TSC teachers and a total enrollment of 1595 learners (1091 boys and 504 girls) out of which 136 are PWDs. In respect to social amenities, lunch is provided to 50% of the students while 5409 reusable sets of dignity packs are provided to girls annually. 50% of the water source is rain, 25% is river water. Additionally, 50% practice rainwater harvesting. The cost of water per term is generally more than KES. 5,000/-. All the four institutions have a total of 20 latrines 25% of which are gender segregated. In terms of energy, 25% of the institutions have access to electricity that is not often available, however, they depend entirely on firewood for cooking.
3	Garisssa	Bura Boarding Primary	1.090075, 39.946345	The learning institutions in Garissa are in an area where 75% of the inhabitants are pastoralist while the rest are mixed farmers. The topography of the area is 75% flat. The area has 30% grass cover while indigenous tree cover is variable. The total land size for all the four institutions of Garissa County is 196 acres. Only one school has a fence and a gate. A half of the classrooms in these institutions are in good condition. The four learning institutions have a total of 39 classrooms, 7 dormitories and 2 dining halls. The institutions have 30 TSC teachers and a total enrollment of 1352 learners (764 boys and 588 girls) out of which 18 are PWDs. In respect to social amenities, lunch is provided to all the students while the 3490 reusable sets of dignity packs are provided to girls annually. 25% of the water source is boreholes, while 75% is river water. The cost of water per term is generally more than KES. 5,000/-. All the four institutions have a total of 33 latrines all of which are gender segregated. In terms of energy, there is electricity most of the time to all the institutions, however, most of them depend on firewood.
		Raya Primary	3.973086°, 41.113808°	
		Ege Primary School	-1.1499712756590987, 41.05223356844131	
		Ijara Technical And Vocational College	**-1.633753° 40.155991°**	
4	Wajir	Wajir Primary	1.744603°, 40.055563°	The learning institutions in Wajir are located in a flat area where 67% of the inhabitants are pastoralists. The area has 30% grass cover and 50% indigenous tree cover. The total land size for all the three institutions of Wajir county in the IMPReSED programme is 85 acres. Two of the institutions have a fence and a gate. The conditions of the classrooms is average. The three learning institutions have a total of 39 classrooms, 8 dormitories and 2 dining halls. The institutions have 29 TSC
		Jukala Primary	Latitude: 2°38'16N Longitude: 39°34"27E	
		Ajawa Primary School	2.960617°, 39.688287°	

		Wajir South Technical And Vocational College	**1.7535° N, 40.0755° E**	teachers and a total enrollment of 1439 learners (877 boys and 562 girls) out of which 355 are PWDs. In respect to social amenities, lunch is provided to only 33% of the students while the 139 reusable sets of dignity packs are provided to girls annually. Water is accessed from sources (boreholes, river & RWH). The cost of water per term is generally more than KES. 10,000/-. All the three institutions have a total of 18 latrines 75% of which are gender segregated. In terms of energy, there is 67% of access to electricity 33% of the time. However, all of them depend on firewood.
5	Samburu	Marti Primary School	1.472612°, 36.719702°	The four learning institutions in Samburu are located in an area that is 75% flat. Three quarters of the rural inhabitants are pastoralists. The area has < 35% grass cover and < 50% indigenous tree cover. The total land size for all the four institutions of Wajir county in the IMPReSED programme is 57 acres. Three of the institutions have a fence and a gate. The condition of the classrooms are generally good. The four institutions have a total of 30 classrooms, 4 dormitories and 1 dining halls. The institutions have 31 TSC teachers and a total enrollment of 1112 learners (boys 659 and 453 girls) out of which 20 are PWDs. In respect to social amenities, lunch is provided all the students while the 1220 reusable sets of dignity packs are provided to girls annually. Water is accessed from sources (boreholes, river & RWH). The cost of water per term is generally more than KES. 5,000/-. All the four institutions have a total of 28 latrines 75% of which are gender segregated. In terms of energy, there is 50% of access to electricity 75% of the time. However, all of them depend on firewood.
		Lkisin Pry School	1.016558 (Latitude), 37.253946 (Longitude)	
		Maralal Vocational Training Center	**1.090620°, 36.697513°**	
		Mtembur primary School	1.4470032838469673, 35.03925720616888	
		Kitelakapel Technical Training Institute	**1.4012679929091854, 35.02246387969321**	
7	Kilifi	Kasikini Primary	-2.951569°, 39.775030°	The four learning institutions in Kilifi are located in a cosmopolitan county whose inhabitants are mixed farmers. The area is generally flat. Three quarters of the area has 45% grass cover and < 50% indigenous tree cover.
		Changoto Primary	-2.806684°, 39.888250°	
		Soso Chamari Primary School	-2.905911°, 39.898266°	

		Dida Primary School Sukoke	TBD (To Be Determined)	The total land size for all the four institutions of Kilifi county in the IMPReSED programme is 54.5 acres. Two of the institutions have a fence and a gate. Three of the institutions have generally good buildings conditions. All the four institutions have a total of 32 classrooms, all with no dormitories or dining halls. The institutions have 24 TSC teachers and a total enrollment of 1451 learners (boys 743 and 708 girls) out of which 34 are PWDs. In respect to social amenities, lunch is provided all the students while the 12250 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from rain. The cost of water per term is generally less than KES. 5,000/-. All the four institutions have a total of 46 latrines 50% of which are gender segregated. In terms of energy, there is 75% of access to electricity 25% of the time. However, all the institutions depend on firewood.
		Mariakani Vocational Training Centre	**-3.860785°, 39.482785°**	
8	Bungoma	Nakalira RC	0.605067°, 34.428789°	The two learning institutions in Bungoma are located in an area whose inhabitants are mixed farmers. The area has undulating hills of 10% - 30% slopes with about 50% grass cover and < 50% tree cover. The total land size for all the two institutions is 7.2 acres. All of them have a fence and a gate but with poor building conditions. All the two schools have a total of 23 classrooms each with approximately 100 learners, and no dormitories or dining halls. The institutions have 26 TSC teachers and a total enrollment of 1438 learners (boys 721 and 717 girls) out of which 109 are PWDs. In respect to social amenities, lunch is provided all the students while the 3600 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the tap (50%). The cost of water per term is generally > KES. 10,000/-. All the four institutions have a total of 33 latrines 50% of which are gender segregated. In terms of energy, there is 50% of access to electricity that is available most of the time. However, all the institutions depend on firewood.
		Chepkube SA Primary	0.829725°, 34.427548°	
9	Homa Bay	Lambwe Primary School	0.575156°, 34.369833°	

		Ndhuru Primary	0.528460°, 34.463399°	The two schools in Homa Bay are located in an area whose inhabitants are mixed farmers and fishermen. The area has gently undulating hills of < 30% slopes with about 40% grass cover and < 50% tree cover. The total land size for all the two institutions is 28 acres. Only one school has a fence but both have no gates. All the two schools have a total of 16 classrooms each with approximately 113 learners, one dormitory and no dining halls. The schools have 19 TSC teachers and a total enrollment of 890 learners (boys 463 and 430 girls) out of which 9 are PWDs. In respect to social amenities, lunch is provided all the students while the 3200 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the tap (50%). The cost of water per term is generally > KES. 10,000/-. All the four institutions have a total of 33 latrines 50% of which are gender segregated. In terms of energy, there is access to electricity most of the time and all the institutions depend on firewood.
		Ogande Girls Secondary	0°34'56"N 34°29'56"E 0.49727673726392274, 34.5812748068719	
10	Siaya	Uuna Primary School	0.006197°, 34.346686°	The two rural institutions considered for Siaya county are Kochieng and Uuna primary schools. They are located in a gently undulating landscape of < 30% slope. They are in an area occupied by mixed farmers. The landscape is a mosaic savanna of 50% grassland and >75% tree cover. The total land size for the two schools is 1.82 acres. Only one school has a gate with both not being fenced. Otherwise the general condition of the school buildings is below average. The two schools have a total of 17 classrooms with an average of 49 learners per class. They do not have dining and boarding facilities. The schools have 24 TSC teachers and a total enrollment of 759 learners (boys 382 and 375 girls) out of which 13 are PWDs. In respect to social amenities, 1900 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the rainfall but barely adequate. The cost of water per term is generally > KES. 5,000/-. All the three institutions have a total of 26 latrines that are gender segregated. In terms of energy, there is access to electricity on a fairly regular basis. All the institutions depend on firewood.
		Kochieng Primary School	0.0925°N, 34.2253°S	
		Siaya Innovation hub	0.01107°N, 34345609°E	
		Tutu Primary school	1.210689°, 36.608210°	

11	Machakos	Ndatani Primary School	Longitude: 1.05376 S1°3’13.536” Latitude: 37.7942533 E37°47’39.31188	Mukengesya Primary in Machakos county is a rural school where the community practice mixed farming. The area is generally flat. The landscape is a mosaic <30% grass cover and > 75% tree cover. The total land size for the school is 3 acres. The condition of the school is fair but is does not have either a fence or a gate. The school has a total of 7 classrooms with an average of 14 learners per class. They neither have dormitory nor dining halls. The schools have 6 TSC teachers and a total enrollment of 108 learners (boys 64 and 44 girls) and no PWDs. There are no cases of pregnant girls recorded either. In respect to social amenities, 90 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the river and it is inadequate. The cost of water per term is generally < KES. 5,000/-. The school has 3 latrines which are gender segregated. In terms of energy, there is no access to electricity although they depend on firewood for cooking.
		Mukengesya Primary School	Latitude: 1.0314917, S1°1’53.37012” Longitude: 37.8158067 E37°48’56.90412”	
12	Nairobi	Kangemi Primary	1.270712°, 36.748391°	The two schools in Nairobi are located in urban informal settlements. The area is gently flat with < 5% slopes and about 50% tree cover. The total land size the two schools is 9.2 acres. Both schools have good condition of their buildings. They are also well fenced. The two schools have a total of 66 classrooms each with approximately 135 day scholar learners. They do not have dining halls either. The schools have 65 TSC teachers and a total enrollment of 3848 learners (boys 1872 and 1976 girls) out of which 31 are PWDs. In respect to social amenities, lunch is provided 50% of students while 13760 reusable sets of dignity packs are provided to girls annually. Water is accessed mainly from the tap (50%) as well as borehole. The cost of water per term is generally > KES. 5,000/-. All the four institutions have a total of 79 latrines all of which are gender segregated. In terms of energy, there is access to electricity all the time. All the institutions depend on firewood.
		Kibera Priamry	1.310018°, 36.784348°	
		Mukuru Primary	1.312650°, 36.849146°	
		Kenya High School	1.275823°, 36.780718°	

Programme location map

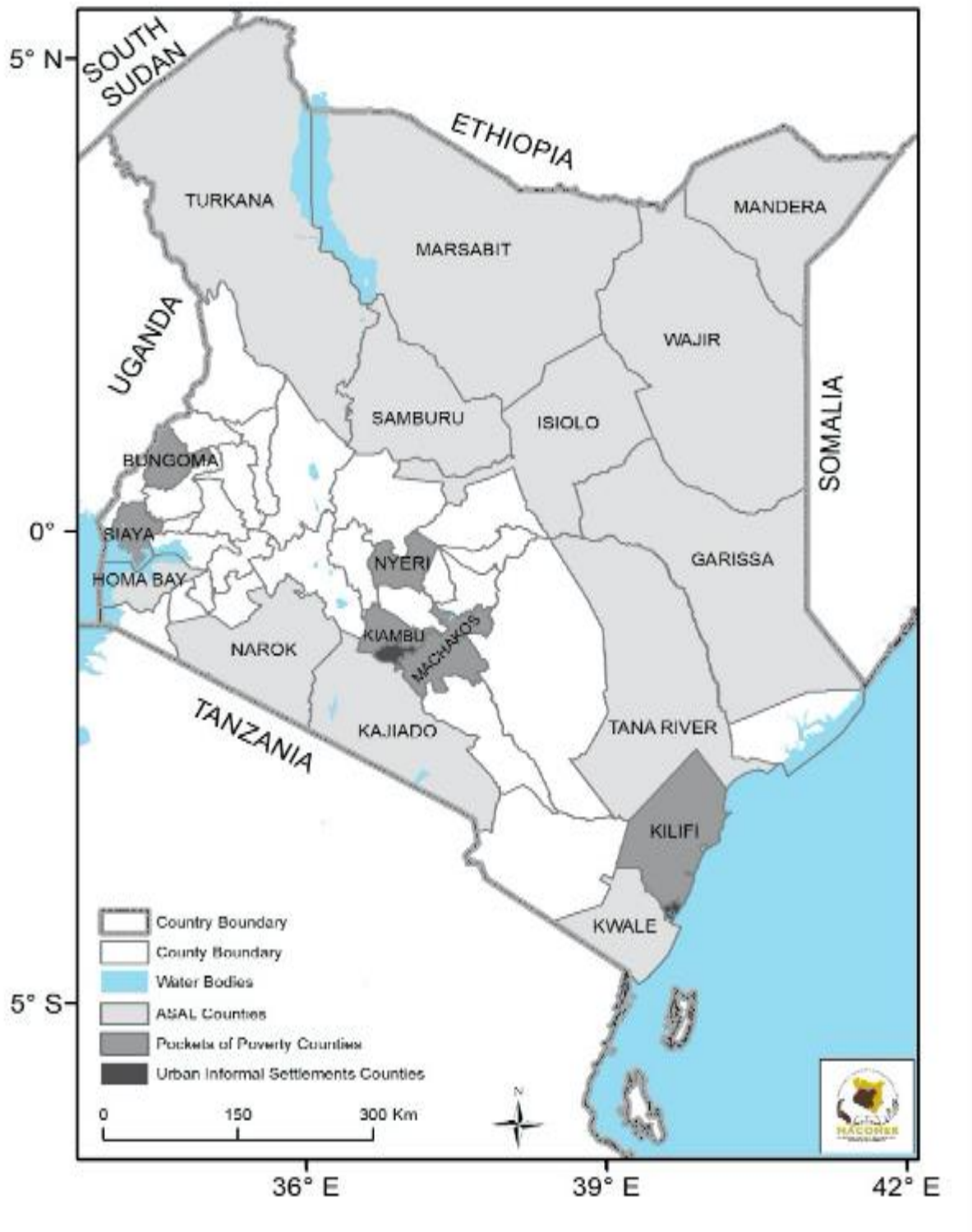


Figure 1: *Map of IMPReSED Project counties*

2.4 Programme Description

The Programme infrastructural activities will involve:

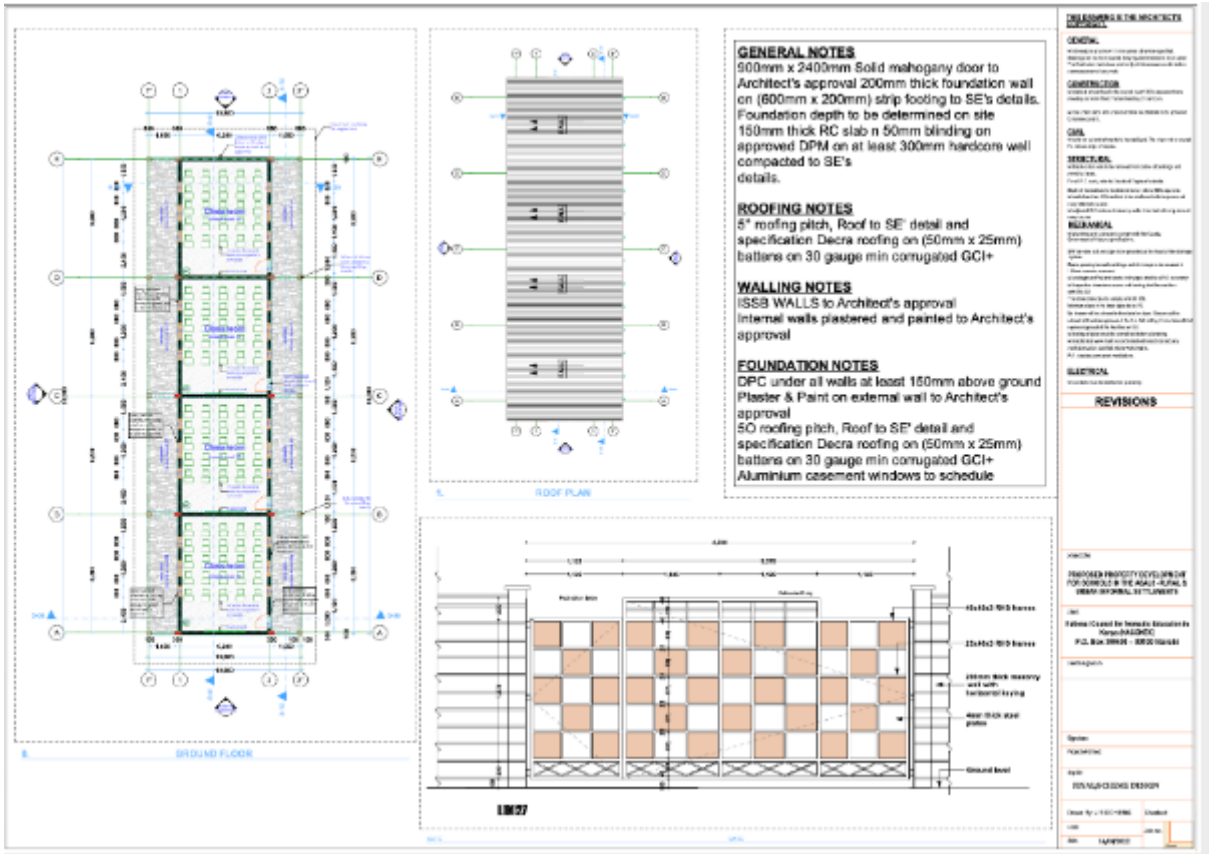
1. Construction of Classrooms
2. Construction of fences
3. Renovation of classroom and bathrooms
4. Establishment and Construction of sanitation blocks
5. Construction of ponds (truncated, sausage and pyramid tanks/ponds)
6. Construction of boreholes
7. Shallow wells, riverine boreholes and ground water dowsing
8. Reverse Osmosis of water from boreholes
9. Establishing Micro irrigations and kitachen gardens
10. Installation of solar energy for solar pumping of water, lighting and charging appliances
11. Installation of Clean cooking system/energy saving jikos
12. Installation of clean food storage with silos.
13. Upgrading the ICT innovation hub

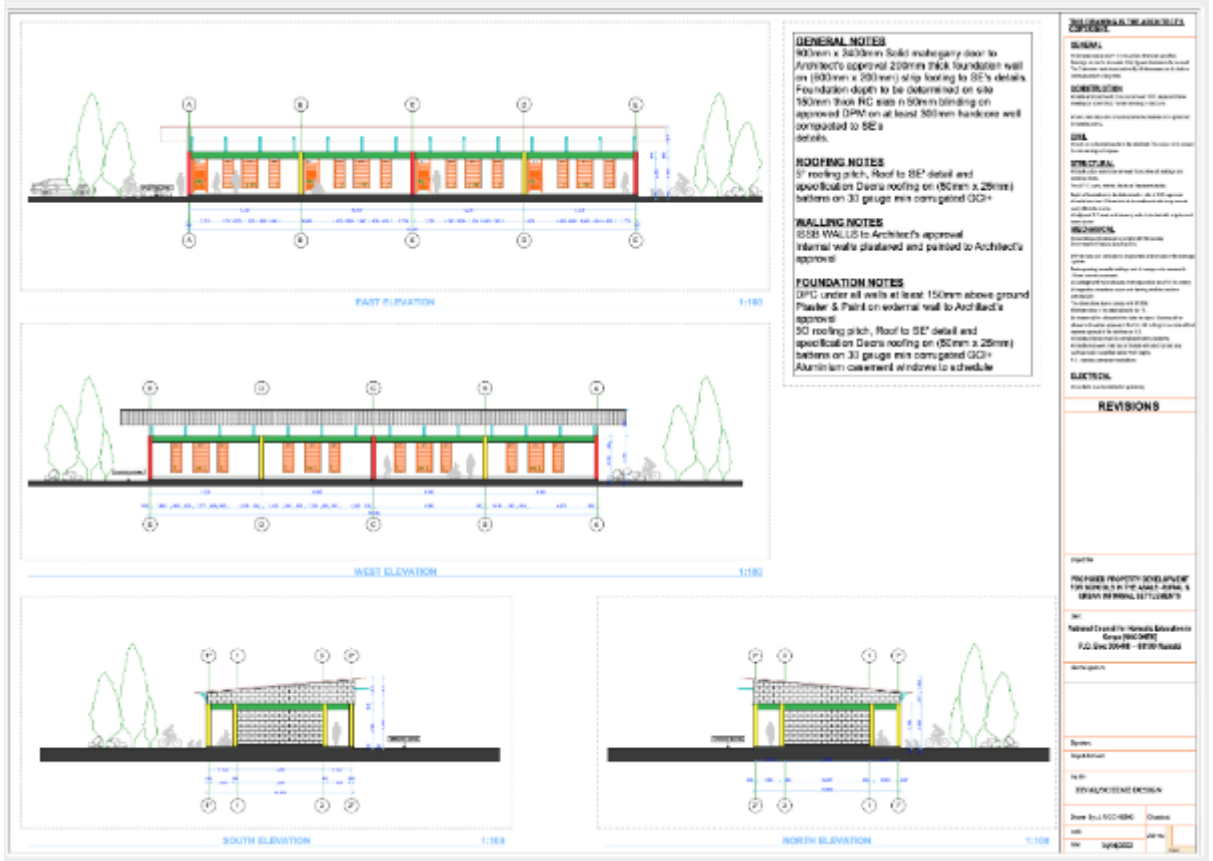
2.4.1 Construction of Classrooms

The proposed classroom block is a single building partioned into 4 rooms, The design concept of the building is based on portraying an institutional look of the building. Each Classroom shall occupy an area of approximately 85m2 and shall be located in a place conveniently accessible within the school. Multiple classrooms shall be positioned adjacent to one another for efficiency of use and construction. They shall be constructed using affordable technologies and materials depending on the geographical location of the site, location environmental and social setting, material accessibility and cultural preferences. The classroom will accommodate fifty students. It will be furnished with fifty wooden chairs and desks to be utilized by the students. The optional choices of construction technologies and material include:

- **Walls**: Stone wall, Masonry blocks, stabilized soil blocks, expanded polystyrene, precast concrete wall panels etc.
- **Floor**: 150mm thick reinforced concrete slab finished with 30mm thick oxidized cement sand screed or terrazzo
- **Windows**: Purpose made mild steel casement windows neat cut and welded.
- **Roofing**: Roofs shall be done using cured sawn timber roof structures. Roofs shall be hoisted and fixed in place approximately 3.00 Meters above ground floor slab level and finished with pre-painted Box Profile Iron roofing sheet of 30 gauge
- **Lighting**: The facilities will utilize natural lighting
- **Doors**: Mild steel casement; 50x50x3mm thick frame plugged

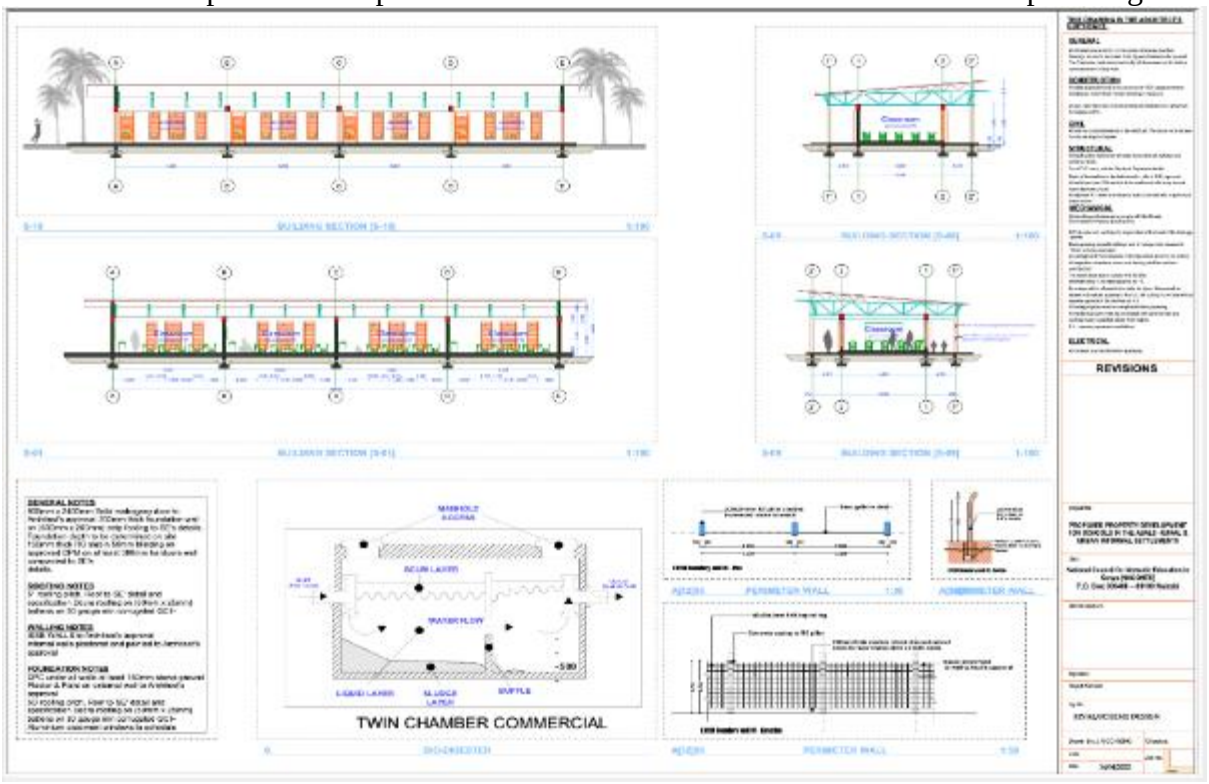
The architectural floor plans of the class rooms are attached below


GENERAL NOTES
900mm x 2400mm Solid mahogany door to Architect's approval 200mm thick foundation wall on (600mm x 200mm) strip footing to SE's details. Foundation depth to be determined on site 150mm thick RC slab n 50mm blinding on approved DPM on at least 300mm hardcore well compacted to SE's details.
ROOFING NOTES
5° roofing pitch, Roof to SE' detail and specification Decra roofing on (50mm x 25mm) battens on 30 gauge min corrugated GCI+
WALLING NOTES
ISSB WALLS to Architect's approval
Internal walls plastered and painted to Architect's approval
FOUNDATION NOTES
DPC under all walls at least 150mm above ground
Plaster & Paint on external wall to Architect's approval
5O roofing pitch, Roof to SE' detail and specification Decra roofing on (50mm x 25mm) battens on 30 gauge min corrugated GCI+
Aluminium casement windows to schedule
REVISIONS


GENERAL NOTES
ROOFING NOTES
WALLING NOTES
FOUNDATION NOTES
REVISIONS

2.4.2 Construction of Fences

This will involve development of a masonry perimeter wall fence all round the proposed project site. The development of the perimeter wall will also include construction of respective gates

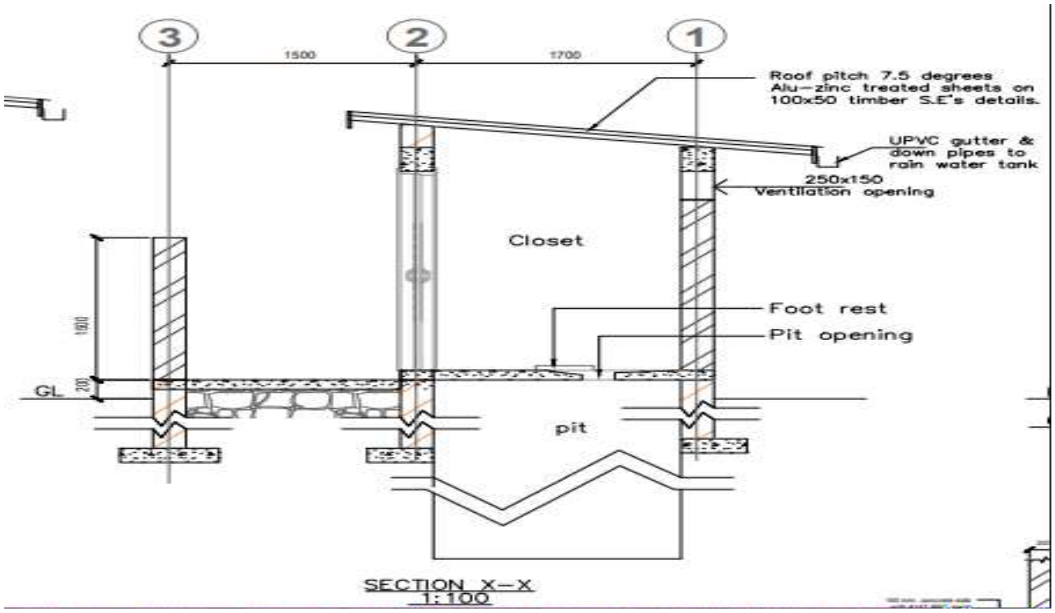


2.4.3 Construction of Sanitation Blocks

Each pit latrine shall occupy a total area of not more than 21sqm and shall be situated so as to be conveniently accessible within the school. Pit latrine facilities shall be positioned adjacent to existing pit latrines for efficiency of use and construction. The pit latrine will be constructed using materials such as concrete, masonry, timber and galvanized roofing sheets.

The main components of the pit latrine shall be the pit, the slab, vent pipe and the superstructure (latrine shelter). The pit shall have a depth of 4metres and 1 metre width. The vent pipe shall have a diameter sufficient enough for airflow during the operation phase.

In mixed schools there shall be separate facilities for each gender. The boys pit latrine will have four doors to serve one hundred and twenty boys (1 latrine to 30 boys) while girls' latrines will have four doors to serve one hundred girls (1 latrine to 25 girls). Each facility will have one cubicle to serve pupils living with disability. The latrines will be exhausted by NEMA approved exhaust service providers periodically depending on how often the facility is filled. This can range from annually to biannually.



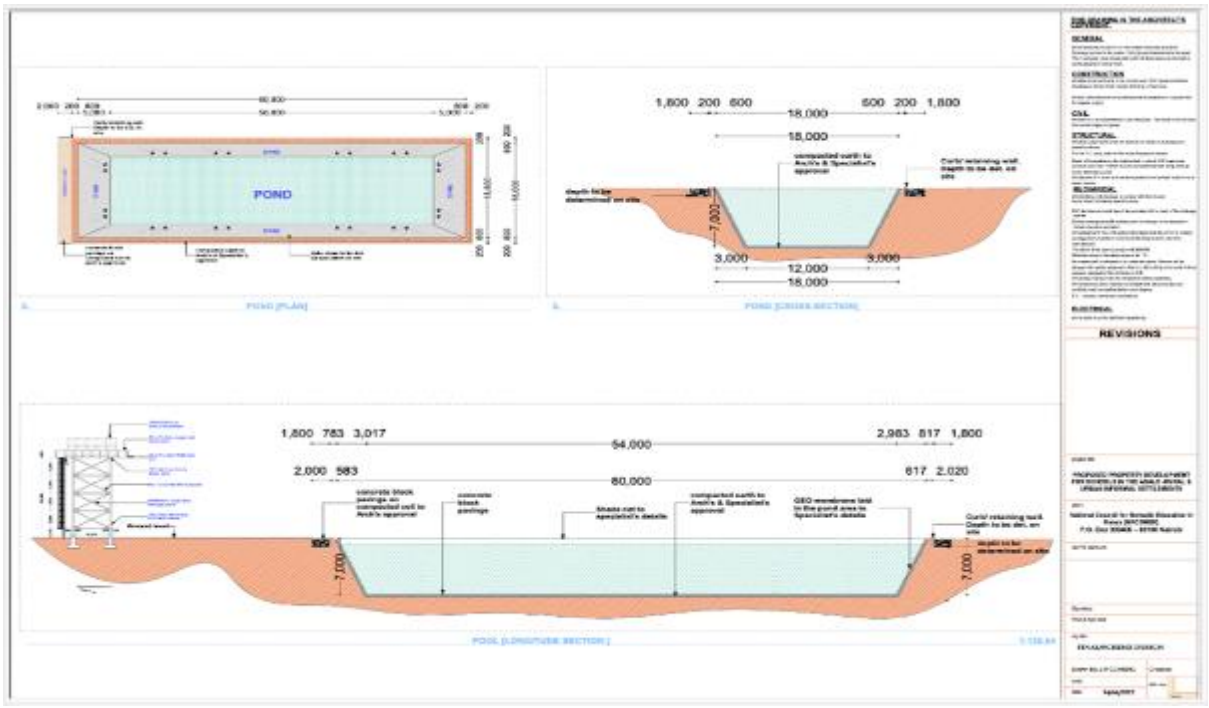
Typical Pit Latrine layout

2.4.4 Construction of ponds (truncated pyramid and sausage tanks/ ponds) which are less than four million litres capacity.

Truncated pyramid pond is an underground reservoir with a shape of an inverted pyramid whose apex is cut off (truncated). This gives it a shape of a pond with sloping sides. The pond is lined with geo-membrane made of polyvinyl chloride (PVC) material with 1mm thickness to curb seepage losses. The reservoir size for the pond is designed according to its usage and water demand and can range from 250 m^3 litres to as much as 10,000 m^3 litres. For the arid and semi-arid areas, the truncated pyramid pond is usually very big in size and preferably in cascades of 5,000 m^3. However, the size can be reduced to 1,000 m^3 for semi-arid zones of Kenya. Whichever the case, the ponds have to be covered by shade-nets with a shading capacity of at least 80%, to impede evaporation losses.

The main reason for these ponds is to harvest ground runoff water and conserve it so that it can be accessed and used for irrigation of crops, pasture and trees at the school and community farms. When runoff water is captured from the upstream ground catchments, the water is conveyed via waterways that are vegetated using vetiver grass. This is a biological approach to reducing siltation to the pond. Just before the water enters the pond, it flows into a physically automated silt-trap which is a masonry infrastructure.

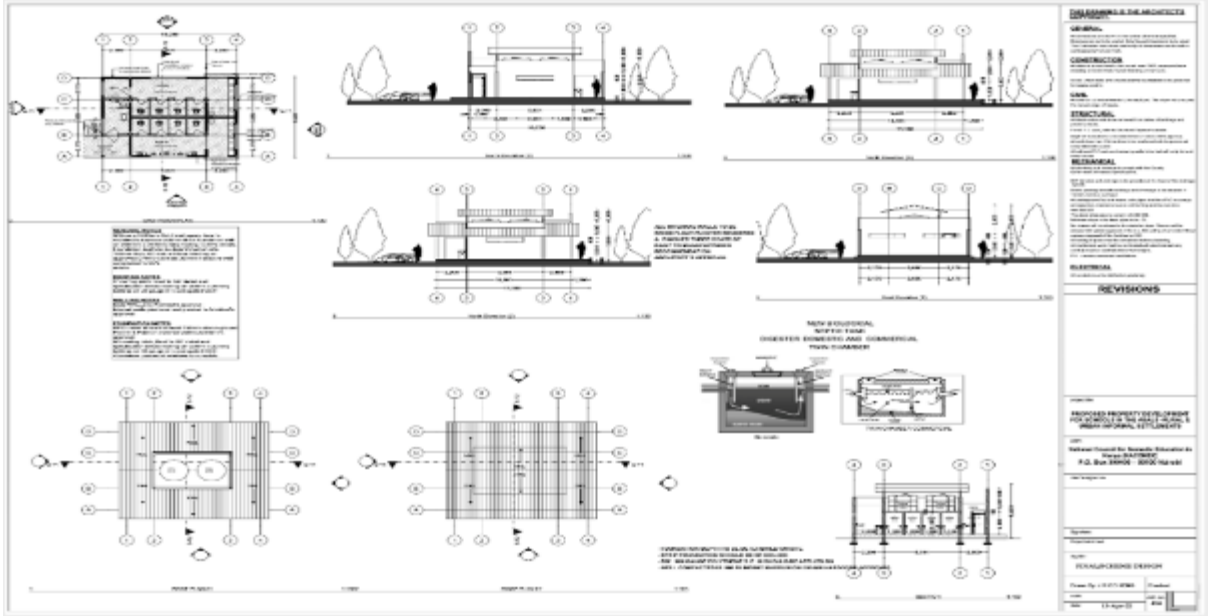
Sausage tank reservoir is a cylindrical reservoir with a diameter of between 1.2 to 1.5m and length which can go as long as the classrooms building go. The tank can be made of any material e.g. reinforced concrete, interlocking blocks, stones or bricks – depending on availability close to the site. The tank is laid underground to avoid exposure to weather conditions and also not to interfere with the aesthetics of the school compound. Although Sausage tank is largely a reservoir for roof runoff water, it can also be used to store water from boreholes including those that have been purified using reverse osmosis technology. The water stored in Sausage tanks is best used for sanitation and hygiene purposes.
The Architectural drawings are as attached below



2.4.5 Construction of Boreholes and treatment Through Reverse osmosis of water from boreholes.

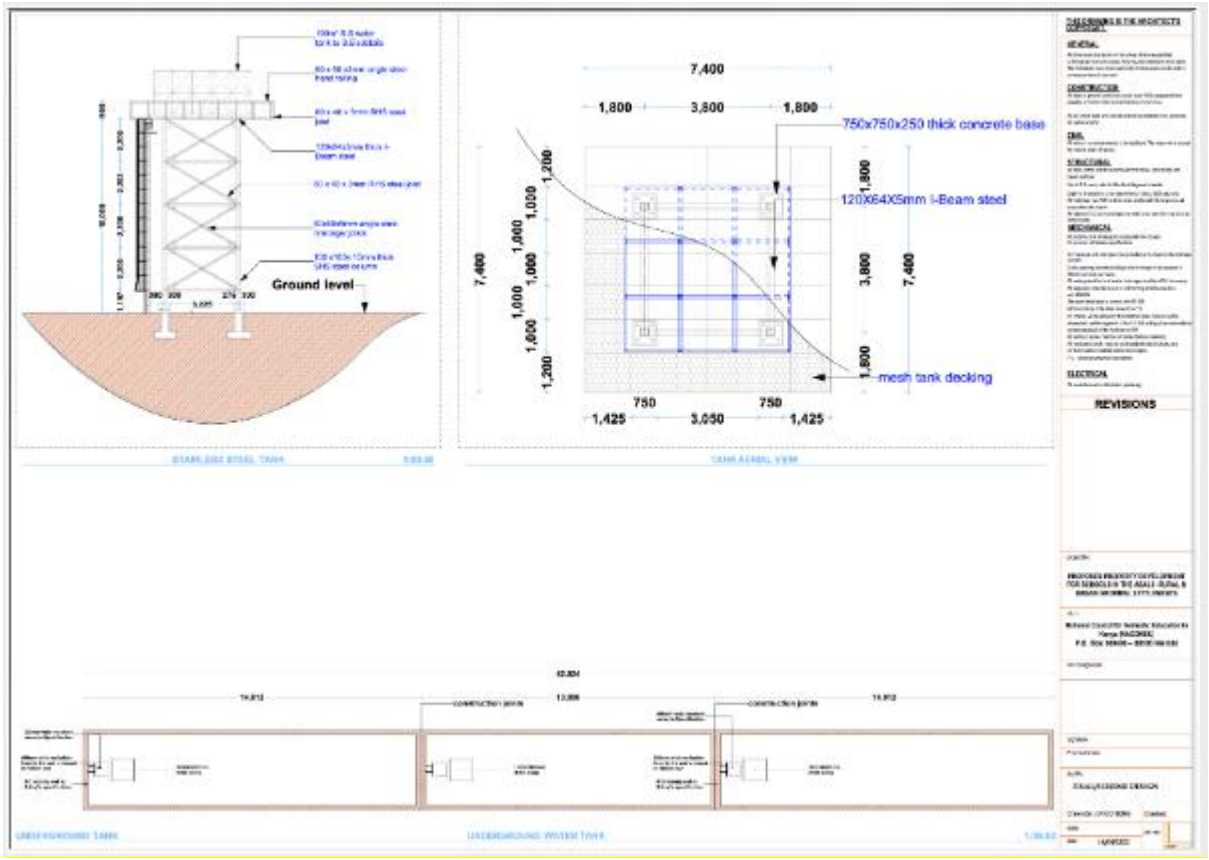
Boreholes have a galvanized iron casing to allow for insertion of a submersible pump with related electrical wiring and Solar pumping unit complete with photo voltaic panels, batteries and invertors. The reverse osmosis technology where water is treated to remove impurities or contaminants through application of pressure to force water molecules through a semipermeable membrane. As this happens, the impurities are filtered out and flushed away.

The result is clean, sweet / portable drinking water. They come in varying scales. Some are for domestic use while others are for institutional or industrial use. In the case of IMPReSED project, the RO system used is the institutional / industrial one which can generate between 150 m^3 / day to 1650 m^3 / day. The Architectural drawings are as attached below:



2.4.6 Roof and ground water harvesting to sausage tanks.

A complete roof water harvesting system has the following components: the roof catchment which quite often is made of iron roofs; the gutters for immediate capture of roof water runoff and conveyance into the downpipes. Gutters can either be metallic or made of PCV material; downpipes which receive water from the gutters and conveys the water to a physically automated foul flush mechanism; a by-pass pipeline that conveys water to a reservoir. For the schools in ASAL regions, Sausage tank is the preferred reservoir for roof water catchment systems. The architectural drawings are as attached below:

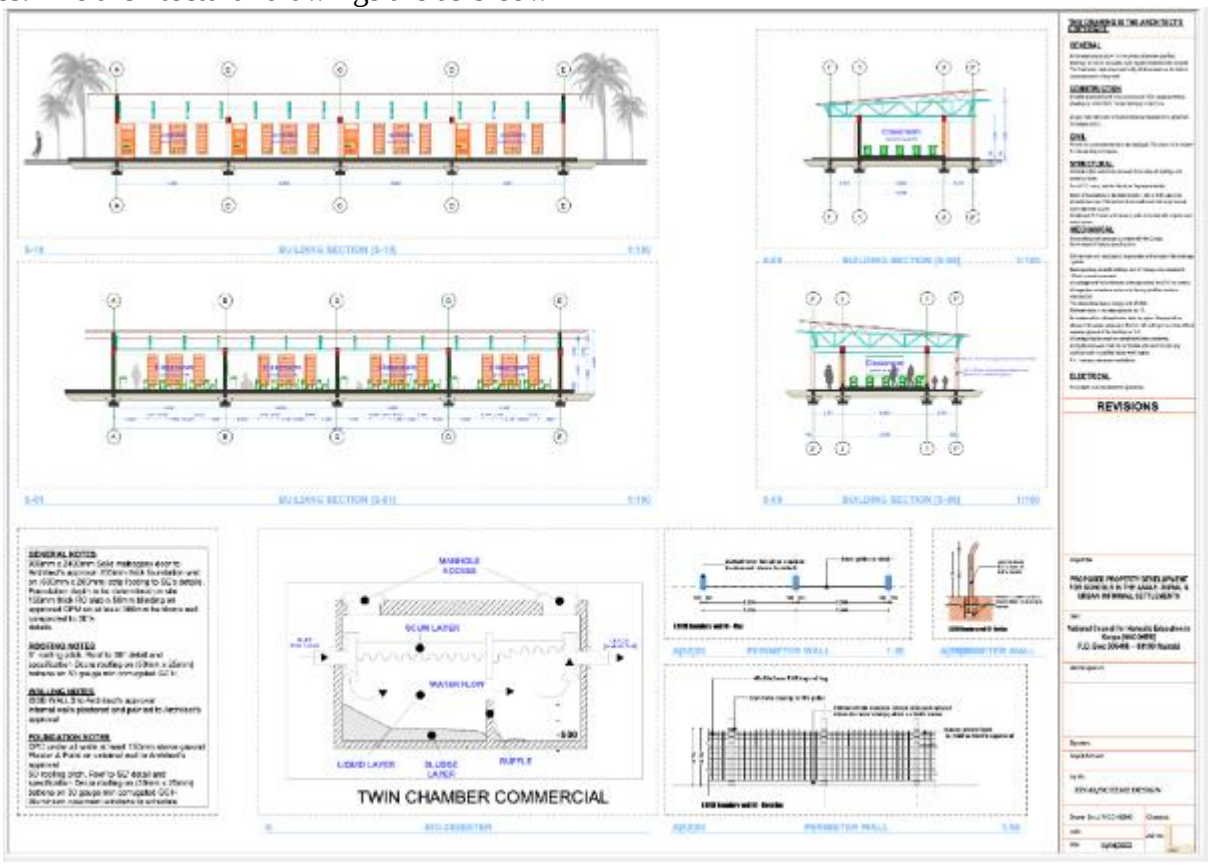


2.4.7 Shallow wells, riverine boreholes and ground water dowsing.

These are boreholes sunk close to a perennial or intermittent river. Because of continuous flow, the river water quality is often non saline, however, it is silted owing to land degradation of pulverization by upstream users. The water table is also high. This is true also for shallow wells whose water table barely goes beyond 30m. This is the reason the borehole is sunk by the banks of the river to allow water for natural filtration as it finds it level on both sides of the river. The water level that extends on both sides of the river recedes away the further one goes away from the river.

As much as riverine borehole is easier to sink given that the water table is predictable, uplands borehole requires expertise in water dowsing (searching) using hydro-geological equipment such as terra meters. The best borehole obtains from an underground river which is regularly renewed. Still water bodies are often saline or brackish in taste. Like the riverine borehole, uplands borehole also have galvanized iron casing to allow for insertion of a submersible pump with related electrical wiring and Solar pumping unit complete with photo voltaic panels, batteries and invertors.

Underground aquifers are a source of waters that emanate from natural recharge during runoff flows. Depending on the geology of the soils/rocks, the water may be sweet or saline. Most of the aquifer water is used for agricultural purposes, especially for irrigation of crops, pasture and trees. The architectural drawings are as bleow



2.5 Programme Design Considerations

During the project design phase of the proposed infrastructure components, the following were taken into consideration;

- A preliminary investigation was undertaken to determine the topography, ground water table level, nature and characteristics of the soil and their bearing capacities. The results were to determine the nature of the structural forms that will be adopted with regards to foundations and the structures scale.
- The type of storm water drainage system to be adopted has been influenced by the results of the preliminary investigation.
- The proposed project site's location was deemed appropriate based on the needs assessment report and layout of the various site
- The proposed site's location are not ecologically sensitive.
- The sanitary facilities shall at all times be constructed away from any surface or underground water source. A buffer distance; bottom of the pit should be at least 2 m above groundwater level, and a minimum horizontal distance of 30 m between a pit and a water source. Such sanitary facilities shall have their pits lined with an impermeable layer of concrete/brick to prevent underground and surface water receptors from pollution. This shall be adopted for sanitary facilities located in a low water table region.
- To prevent the spread of disease transmitted by flies or rodents (proper length and location of ventilation pipe)
- To be free from offensive smells (give odour control) and unsanitary conditions
- Present no health risk to people using or maintaining the system

- Be culturally acceptable and gender sensitive (ensure privacy)
- Topography, hydrological and geological set up of the area e.g., where soil conditions with high water table should have completely sealed pit lining (not perforated) and up-lifted (50-75cm above ground) latrine is required to prevent it from collapsing.

2.6 Programme Inputs

The project inputs include the following:

- Construction raw materials i.e. sand, cement, stones, crushed rock (gravel/ ballast), ceramic tiles and other ceramic fittings, clay vent blocks, steel and wooden fixtures and fittings (such as doors windows), glass, steel metals, timber, painting materials among others. All these should be obtained from licensed dealers and especially those that have complied with the environmental management guidelines and policies.
- Construction machines including machinery such as trucks, concrete mixers, and tools and other relevant construction equipment. These will be used for the transportation of materials, clearing of the vegetation, excavation and in the construction of the project. Most of the machinery will use petroleum products as the source of energy.
- Construction labour force will include; skilled, semi-skilled and non-skilled workers. The skilled workers will include the masons, plumbers, electricians, painters, carpenters, building site supervisor, structural & civil engineers, architects, site environment health and safety officer, first aiders, landscapers among others.
- The construction workers will require clean water supply (drinking water) and mobile toilets to cater for both gender at the project site.
- Volumes of water for construction purposes will be supplied from available sourcses of water within project sites
- Power will be sourced from the Kenya Power main grid within project sites

2.7 Programme Activities

2.7.1 Planning and Design Phase

This is a purely preparatory stage of the project with minimal physical engagements at the project site. The activities entail mostly boardroom consultations/ meetings, site visits, site physical investigations, literature review and stakeholders and public consultations and participation meetings.

2.7.2 Pre-Construction Activities

In each sub-project site, the contractor will establish stores to store materials, tools, protective equipment and project documents. The contractor will also provide sanitary facilities for workers and site visitors. The stores and sanitary facilities will be temporary and the contractor will remove them upon completion of the projects.

Furthermore, there will be no worker's camps in the sub-project sites. The contractor should ensure that employees come from the locality of the project. Skilled labour force who come from far will also reside in hotels or residential estates close to the project area to ease movement and provide close monitoring and supervision of the project.

i. Transport

The contractor shall ensure that the transportation of materials and workers to and from the sub-project sites is done at hours and via routes that will not disturb learning. To address transportation of the materials, the contractor will transport materials to the site between 0500hrs – 0800hrs and 1700hrs – 1900hrs.

Alternatively, the school can provide alternative access routes to the sites which will not affect learning activities between 0800hrs -1700hrs.

ii. Existing Property

The contractor should ensure protection from damage of all existing property such as drains, cables, roads and pipes. If the services or property get damaged during project execution, the contractor will be responsible to meet the cost of repairs and replacements.

iii. Hoarding

It is the responsibility of the contractor to provide each construction site with a hoarding. In addition, the contractor is to meet all precautions requires for safe custody of workers, the general public, materials and end users on the site. WARNING SIGNS shall be availed to provide warning to the public, students and pupils of the dangers of getting near to the construction sites.

iv. Protective Clothing

The contractor has the responsibility to provide all protective or any special clothing or equipment for the employees. These shall consist of safety overalls, goggles, earmuffs, gloves and safety helmets. The contractor should make sure that all staff wear safety helmets all times. The contractor shall allow for providing safety boots, clean lab coat, safety boots, reflector jacket and helmets to the client's representatives and Consultants whenever they visit construction site. The contractor shall allow for a minimum 12 people.

v. Health and Safety

The contractor shall provide protection of the whole of the works including casing up, covering or such other means as may be necessary to avoid damage to the works or injury to persons. Such protection shall be removed when no longer required. The Contractor shall appoint an **Environmental, Social, Health and Safety Officer (ESHSO)** who shall be on Site at all times to ensure compliance of environmental and social safeguards prescribed in this ESMP.

v. Removal of Solid Waste

The contractor shall be responsible to dispose rubbish and debris from buildings and sites as it accumulates and when the works are completed unused materials and scaffolds shall be removed. Disposal of surplus excavated materials, rubbish and debris to a designated place in conformity with this ESMP.

vi. Stakeholder Engagement

The contractor under the supervision of the consultant shall ensure thorough consultation and sensitization of stakeholders such as school boards, teachers and students during the project implementation.

vii. Construction Resources

The contractor shall not use schools' resources such as power, water and security unless the use is approved by the project manager.

2.7.3 Construction Phase

Activities applicable during the construction of the programme infrastructure components iwill entail;

i. Recruitment of workers and their induction on environmental and social safeguards requirements
ii. Transportation and delivery of building materials

Duration of activities

The activities involved during construction will include the following:

(a) Site Clearance
Some of the sites earmarked for the projects have vegetation including grass, shrubs and trees. These will be cleared to pave way for the projects. In cases where it is unavoidable to cut trees, the contractor shall plant double the number of trees cut.

(b) Excavations
Foundation trenches will be dug to a depth of 1.5m starting from the stripped level (for classrooms). While the foundation trenches for the pit latrines shall not exceed 1.5m deep, the toilet pit will be between 1.5m and 4.5m deep. Backfilling around the foundations shall be done in 300mm thick with approved hardcore bed to receive concrete well compacted in layers.

(c) Foundations
The contractor shall use dump-proof membranes to protect water and anti-termite treatment to prevent damage from termites. Natural stone/burn brick shall be used for foundations or use concrete walling with cement and sand in the ratio of 1:4 with 26-gauge hoop iron in every alternate course. SLABS shall be cast in vibrated reinforced concrete class 20/20.

d) **Masonry, concrete work and related activities**
The construction of the building walls, foundations, floors, pavements, among other components of the project will involve a lot of masonry work and related activities. General masonry and related activities will include stone shaping, concrete mixing, plastering, slab construction, construction of foundations, and erection of building walls and curing of fresh concrete surfaces.

e) **Structural steel works**
The building will be reinforced with structural steel for stability; structural steel work involves steel cutting, welding and erection.

f) Roofing and sheet metal works
Roofing activities will include sheet metal cutting, raising the roofing materials such as roofing sheets and structural timber to the roof and fastening the roofing materials to the roof.

g) Transportation of construction wastes from site
Construction waste that cannot be used for either back filling or landscaping work at the site will be collected and disposed of at approved dump-sites by a contracted licensed waste handler.

h) Electrical Works
Electrical work during construction of the premises will include installation of electrical gadgets and appliances including electrical cables, lighting apparatus, sockets etc. in addition, there will be other activities involving the use of electricity such as welding and metal cutting. Electrical work should be carried out by an authorised and competent electrical contractor

i) Plumbing

Installation of pipe work for water supply and distribution will be carried out within the proposed water harvesting works, boreholes drilling works and ground water drowsing works. In addition, pipe work will be done to connect sewage from the premises to the main waste water disposal lines, and for drainage of storm water. Plumbing activities will include metal and plastic cutting, the use of adhesives, metal grinding and wall drilling among others.

2.7.3 Operational Phase

a) Solid Waste and Waste Water Management

The proponent will provide facilities for handling solid waste generated within the facility. These will include dust bins/skips for temporarily holding waste within the premises before final disposal as per the NEMA, Waste Management regulation of 2006.

b) Compound cleaning

Project schools will be responsible for cleaning and washing of pavements, workshops, stores, offices and the compound. Cleaning operations will involve the use of substantial amounts of water, disinfectants and detergents, brooms, rakes, wheelbarrows among others.

c) General repairs and maintenance

Project site compound, lecture rooms, workshops, offices and hostels will be repaired and maintained regularly during the operational phase. Such activities will include repair of building walls and floors, repairs and maintenance of electrical gadgets and equipment, repairs of leaking water pipes, painting, maintenance of the gardens and grass lawns and replacement of worn-out materials among others.

2.7.4 Decommissioning Phase

Decommissioning of operations is here taken to mean that the buildings cease to operate and the premises are closed down or reverted to another use. Under such circumstance, the students, staffs and non-teaching staffs of the institutions will be expected to adhere to the legislation applicable to such undertaking in the laws of Kenya but in general the decommissioning shall be staggered through a number of steps and measures to rehabilitate the site to its status before the commencement of the building's occupancy or to a suitable state for its next use. This will involve looking for alternative uses for the site that is compatible to the surrounding and to the former use. An environmental impact assessment shall be commissioned to advice on the environmental aspects with respect to the identified new use if found necessary. If no other use(s) are found for the site, rehabilitation measures to revert it to its former use a state shall be implemented that include: -

i. Building stones, paving slabs, and other installations of economic use can be sold-off in the market through a bidding or auction sale.
ii. All solid wastes including debris shall be disposed in a designated dump-site.
iii. The site shall be re-vegetated with vegetation capable of protecting the soil from erosion

The proponent will then, de-register its operations and legal requirements such as the certificates of operations will be surrendered to the relevant issuing bodies.

a) Demolition works

Upon decommissioning the project components including buildings, pavements, drainage system, water systems, walls, floors will be demolished. This will produce a lot of solid wastes

which will be used for other reconstruction works or if not usable, disposed of appropriately by a licensed waste disposal company.

b) Dismantling of equipment and fixtures

All equipment's including electrical installation; equipment's, furniture partitions, pipe-work and sinks among others will be dismantled and removed from the site on decommissioning of the project. Priority will be given to reuse of these equipment's in other projects. This will be achieved through resale of the equipment's to other building owners or contractors or donations of this equipment to other institutes, schools, churches and charitable institutions.

c) Site restoration

Once all the waste resulting from demolition and dismantling work is removed from the site, the site will be restored through replenishment of the topsoil and vegetation using indigenous plant species. However, if the land will be used for another project, then the proponent will need to undertake an EIA for the new project as required by law.

2.8 Project Cost and Budget

The project is estimated to be approximately US dollars Fifty Million (**USD 50 Million).** This total cost has been generated from the estimates and the amount includes construction, mechanical works, electrical works, structural works, and all other components like installation of solar energy, boreholes, micro irrigation among others.

Infrastructure Activities List and Budget

	Activities	Activity Details	Budget (USD)
1	Integrated Water	Solarized borehole and water kiosk Micro irrigation Truncated Water Ponds Roof Rainwater Harvesting	2,500,000
2	Integrated School Farming	Planting of trees and grass Planting of food crops	2,200,000
3	Integrated Green Energy	Installation of energy saving jikos Installation of steam cookers Installation of food storage silos	2,600,000
4	Micro Hubs	Containerized Digital Resource Center	1,500,000
5	Rehabilitation	Fencing Roofing Painting Walls and Black boards New desks	1,500,000
	Infrastructure	Construction of 20 new classrooms Constrcution of 10 Bathroom blocks Construction of 10 Girl Hostels	3,600,000
	TOTAL		14,000,000
	0.1% NEMA		**14,000**

CHAPTER THREE
3.0. ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS

3.1 General Overview and Approach

This *Chapter* of the Report provides a description of the existing biophysical and socioeconomic situation of the Programme Area, which may directly or indirectly be affected by the proposed Programme. It is essential that the baseline conditions of an environment are characterised in order to accurately predict the potential effects the Programme may have on the environment. The collection of baseline data therefore focused on providing information to support the assessment of any potential impact of the Programme.

Environmental baseline entails: Climate, temperature, topography, Hydrology, vegetation
Social baseline entails; Child labour risks, labour risks, GBVand SEA risks, GRM, Drug and Alcohol abuse risk, cultural and historical sites, indigenous people/underserved traditional communites
Baseline Information was collected at the following levels:

a. **County Levels of baseline information:**
b. Site Specific level of Baseline Information

3.2. County Levels of baseline information:

The methodology used in conducting Programme baselines included; desktop reviews, key informant interviews, stakeholder consultative meetings and the use of biophysical and socio-economic sciences in GIS environment to generate thematic maps and related information for the proposed programme focal area that constitutes all the 12 counties of Samburu, Mandera, Wajir, Garissa, Marsabit, Homa Bay, Bungoma, Kilifi, Siaya, Machakos, and Nairobi.

Secondary information was collected at the county level aimed at providing a contextual overview of Counties, where the Programme will be implemented.

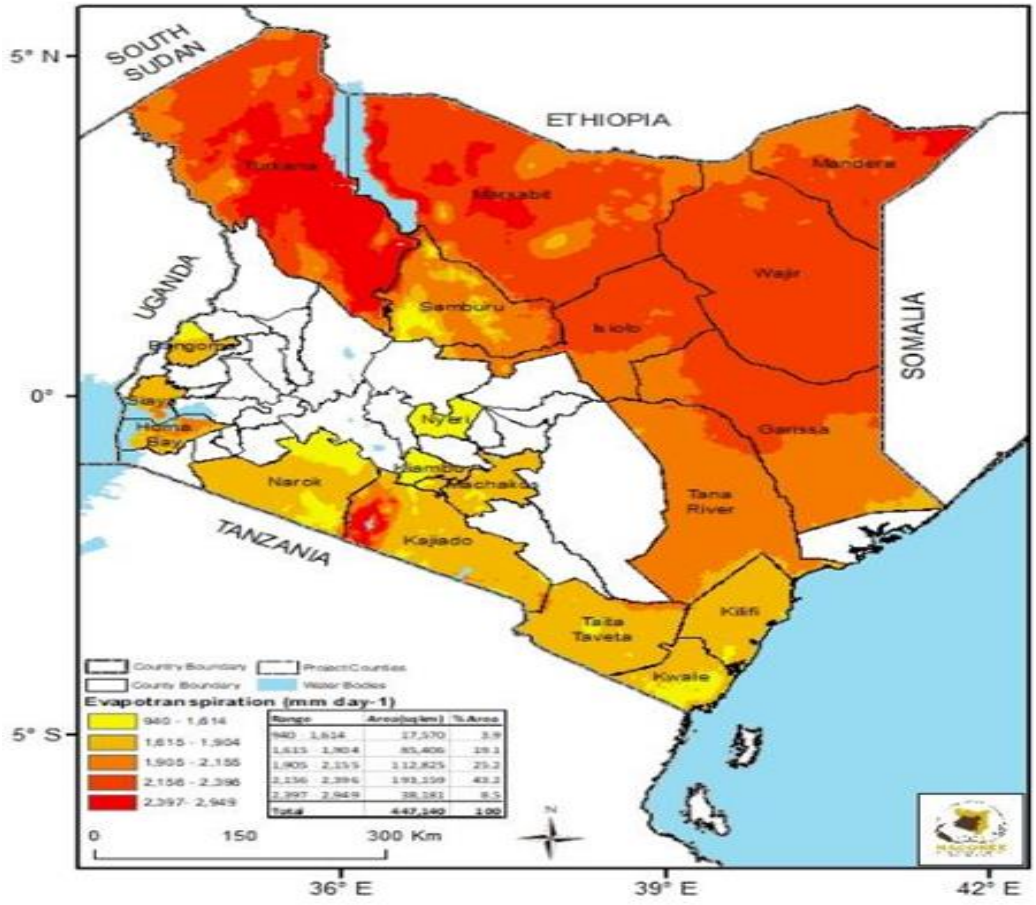
3.2.1 Climate

Climate describes long term weather patterns and therefore the baseline remains the same for many years. The proposed programme counties occupy regions in Kenya that are characterized as arid and semi-arid with climatic phenomenon of high temperatures, high evaporation and evapotranspiration rates and low rainfall events and amounts. The baseline of climatic factors therefore confirms weather patterns and conditions on a given place or region.

The northern and north eastern counties within the IMPReSED Programme area have high temperatures with annual averages for 80% of these regions ranging from 26^{o} to 30^{o} centigrade, except for some pockets of very hot areas in Turkana and Samburu counties that depict annual average temperatures of 31^{o} to 33^{o} centigrade.
These are also the same areas with very high evapotranspiration rates of between 2,100 to 2,900 mm day^{-1}. By definition, arid regions receive less than 250mm of rainfall, while semi-arid regions receive between 250mm to 700mm annually. Since these amounts occur in few days, the amounts are often torrential culminating in massive runoff generation and flooding.

3.2.2 Evapotranspiration

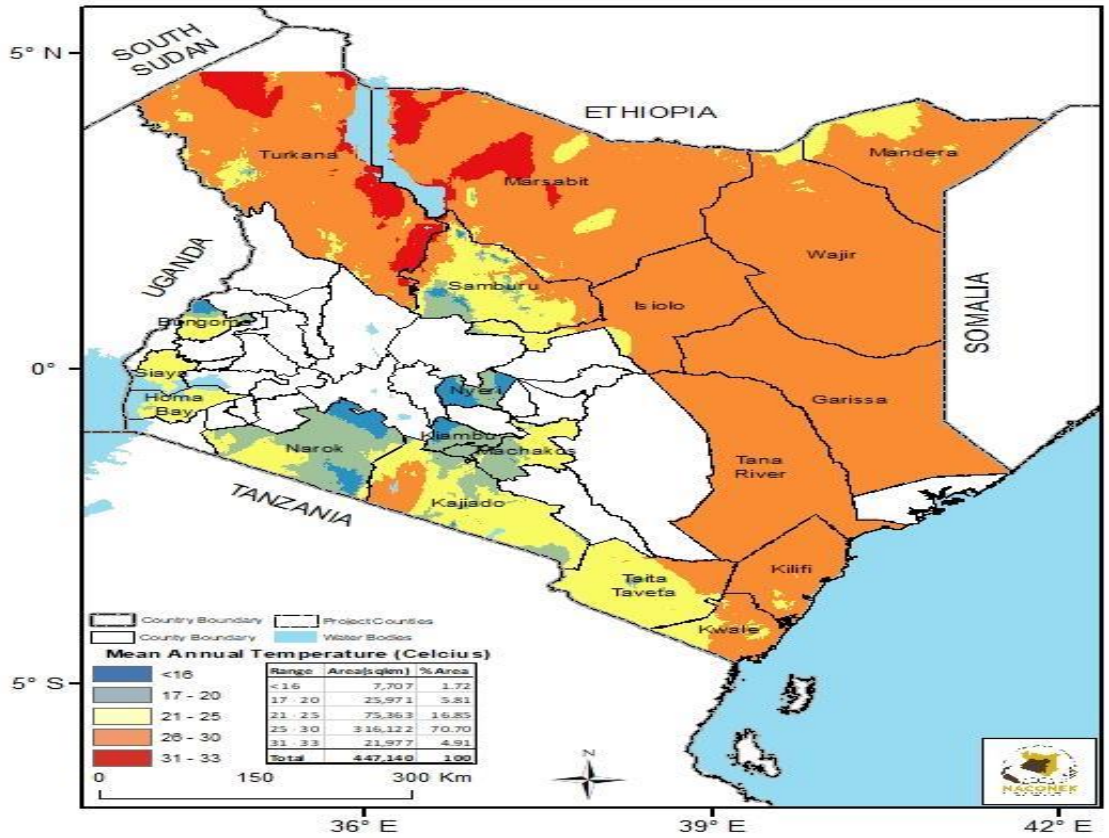
Evapotranspiration is a biophysical parameter that directly corresponds, or proportional to land use land cover (LULC). It is therefore not a wonder that all the northern and north eastern frontier counties, occupying about 50% of the IMPReSED Programme area have evaporation levels of between 2,100 to 2,900 mm day^{-1}. The major factor to these high levels is the high evaporation rates as influenced by the high temperatures. *See Figure 5-1*



Evapotranspiration map for the IMPReSED 12 counties

3.2.3 Temperatures

Temperature is an important attribute given that information captured by meteorological agencies are useful for us to understand the weather trends and use them to plan for climate SMART infrastructure as well as enterprises. The minimum annual temperature map shows that the Northern and North eastern counties have high temperatures, which correlate to high evapotranspiration rates shown above. Indeed, it is the high temperatures that cause high evapotranspiration. This is the reason that surface water storage infrastructure other than rivers and lakes, will be mostly covered with shade-nets. Use of shade-nets has already been piloted with success at Kuno model school. Additionally, the positive aspect to high temperature includes high photovoltaic potential from solar radiation as well as high photosynthesis rates as long as water is available. Figure 6.2 below depicts the annual average temperatures for the 12 IMPReSED counties. *See Figure 5-2*



Mean annual temperature map for the IMPReSED 18 counties

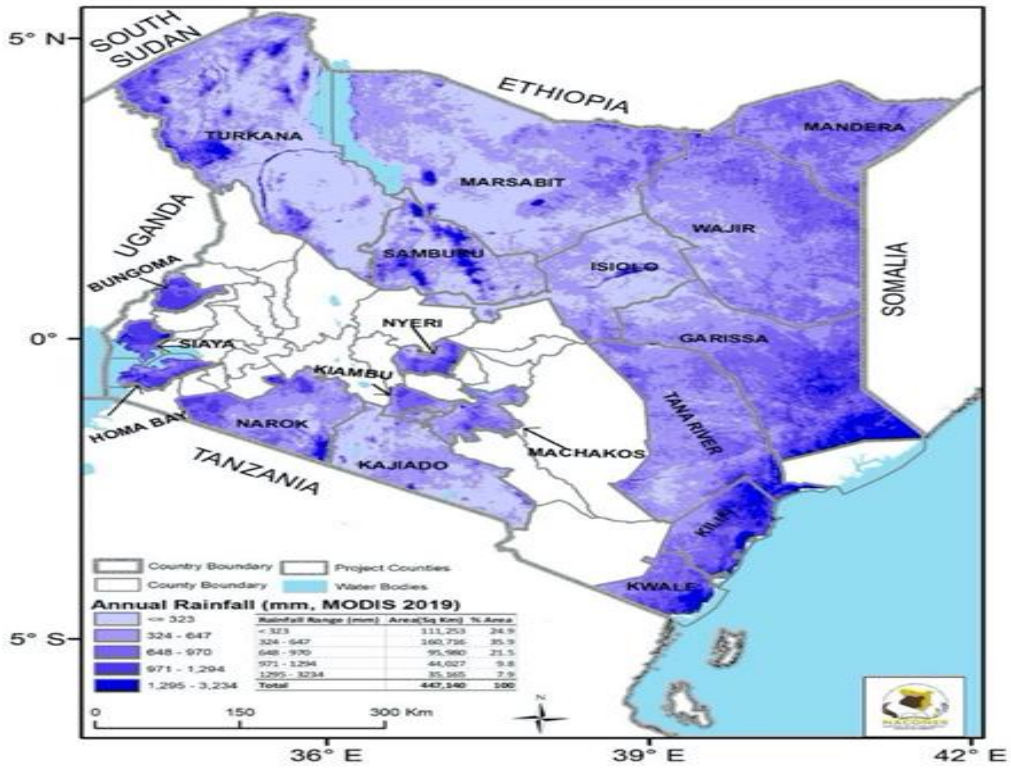
3.2.4 Rainfall

In arid areas, the number of annual precipitation events are few. However, when it does happen, it comes in torrents of floods. Rainy seasons alternate with protracted dry spells and drought in these arid and semi-arid areas. This is exacerbated by climate change. According to Wanjuhi D.M.[2] (2014), the cyclicity (cycle period for rainfall occurrence) of Programmeed drought conditions could be grouped into 2 to 3 years, 4.5 to 7 years and 8 to 12 years in Garissa, Wajir and Mandera respectively.

Thus, a baseline analysis has been done on irrigation potential for each county to highlight on the rainfall amounts reflected in depths and volumes. In-depth analysis was undertaken based on GIS spatial data interpretation. Given that 12 counties of the IMPReSED Programme are within the arid and semi-arid lands, emphasis on harvesting, storage of huge volumes of water is paramount in sustaining livelihoods through provision of water for: sanitation and hygiene; production of food, feed and fodder through supplementary or full irrigation of crops, trees and pasture, as well as drinking water for livestock.

[2] *Wanjuhi Daniel Murimi (2014); Assessment Of Meteorological Drought Characteristics In North Eastern Counties of Kenya. University of Nairobi MSc. Climate Change*

Component 3 for the IMPReSED programme focuses on Sustainable Livelihoods which entails production of green biomass from trees, pasture, crops and livestock, including an agri-pack for value addition of the farm produce.



Annual rainfall distribution of counties in the IMPReSED Programme

3.2.5.1 Analysis of precipitation baselines for the ASAL counties

Analysis of precipitation on the 12 ASAL counties selected for the IMPReSED Programme show that only Narok has annual average precipitation above 1000mm, the semi-arid counties of Kajiado, Isiolo and Samburu have precipitation of about 600mm. The rest, which is Tana River, Marsabit, Garissa, Wajir, Mandera and Turkana fall under the category of very arid to arid counties. None-the-less, all these counties generate a lot of run-off which can be harnessed through surface runoff and flood water management to buffer a lot water for domestic, livestock and irrigation uses.

Assessment of rainfall to potential evapotranspiration (P/PET) ratio indicate that Kajiado, Samburu and Isiolo counties will generally need about eight months of full irrigation activities. Tana River and the Northern frontier counties will need from 9 to 11 months of full irrigation. This leaves Narok that requires only about 5 months of full irrigation interventions. Thus, Narok has both Semi-arid and sub-humid characteristics. ASAL rainfall scenarios are depicted in the figures, map and figure below

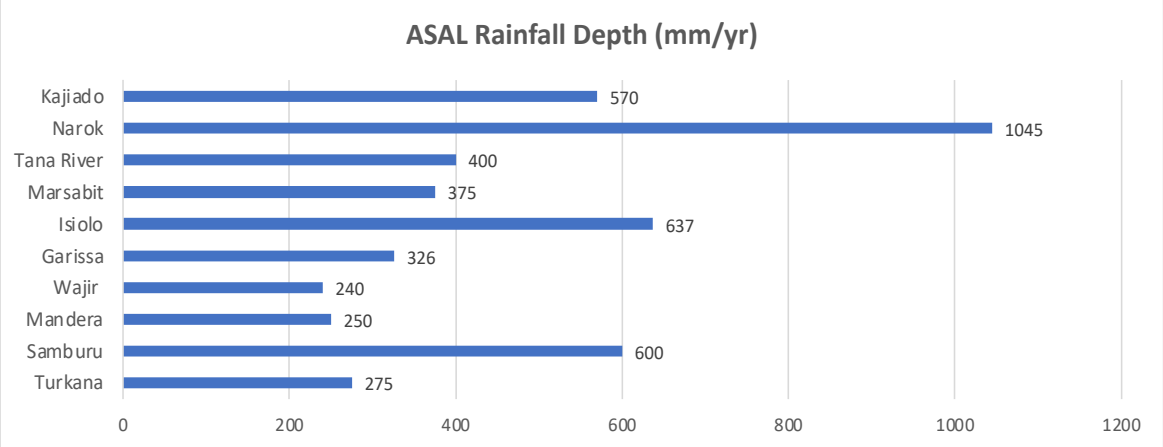


Figure 5-3: *Rainfall depths for the ASAL counties*

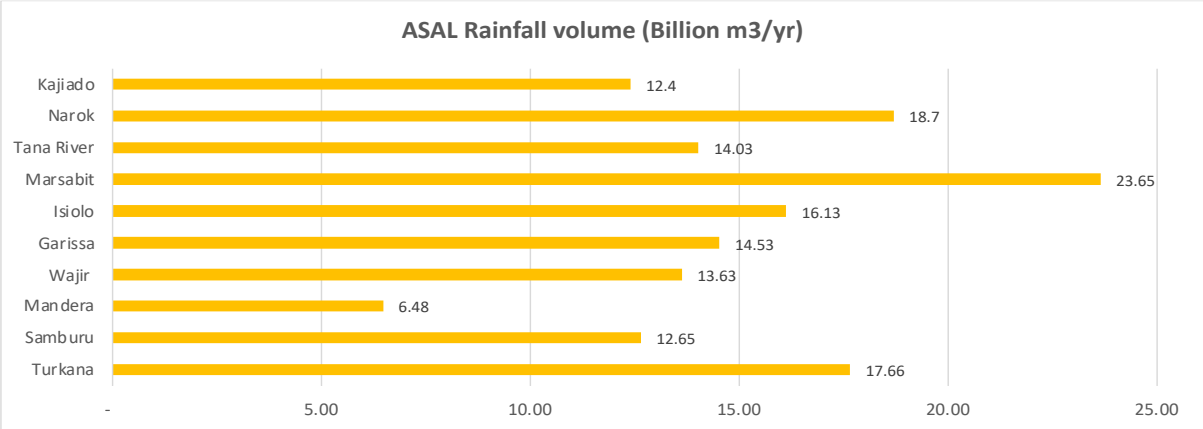


Figure 5-4: *Rainfall volume for the ASAL counties*

Rainfall related Parameters	Arid & Semi Arid Lands (ASALs									
	Turkana	Samburu	Mandera	Wajir	Garissa	Isiolo	Marsabit	Tana River	Narok	Kajiado
Rainfall depth (mm/yr)	275	600	250	240	326	637	375	400	1045	570
Rainfall volume (Billion m3/yr)	17.66	12.65	6.48	13.63	14.53	16.13	23.65	14.03	18.7	12.4

Table 5-2: *Renewable rainfall in depths and volumes for the ASAL counties*

3.2.5.2 Analysis of precipitation baselines for counties with Pockets of Poverty

According to agroclimatic classification, the counties with pockets of poverty in Kenya cut across semi-arid, sub-humid to humid zones. For the IMPReSED Programme, these counties include; Nyeri, Siaya, Kiambu, Kilifi, Bungoma and Homa Bay, with annual average precipitation ranging from 674 to 2155mm. Siaya and Homa Bay, both of which surround Lake Victoria benefit from conventional while Nyeri receives relief influenced rainfall from Mount Kenya region. Interestingly, Kilifi and Nyeri top these counties in the amount of runoff generated from precipitation. Thus, unlike the ASAL counties, counties with Pockets of Poverty regions have reservoirs with smaller volumes. However, since they have higher precipitation, engaging on in-situ water management techniques to produce pasture, crops and livestock will suffice.

Assessment of rainfall to potential evapotranspiration (P/PET) ratio indicate that lands of the counties with pockets of poverty only need fewer months of full irrigation, given their high levels of precipitation. Counties in the Lake Victoria basin, e.g. Homa Bay and Siaya need less than 3 months of full irrigation, while Kilifi and Nyeri need 5 to 6 months of full irrigation per year.

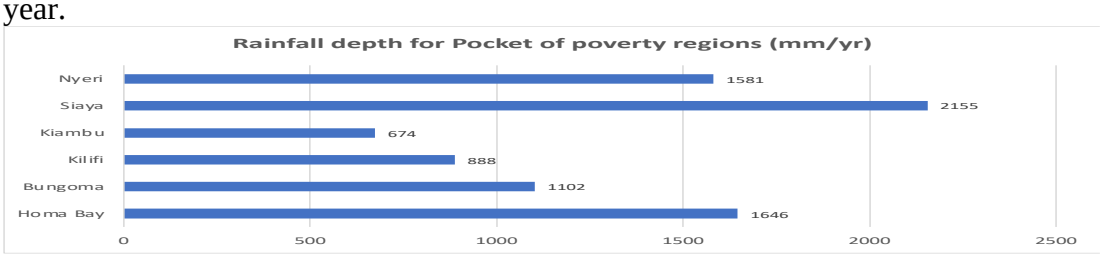


Figure 5-6: *Annual rainfall distribution of counties with pockets of poverty regions*

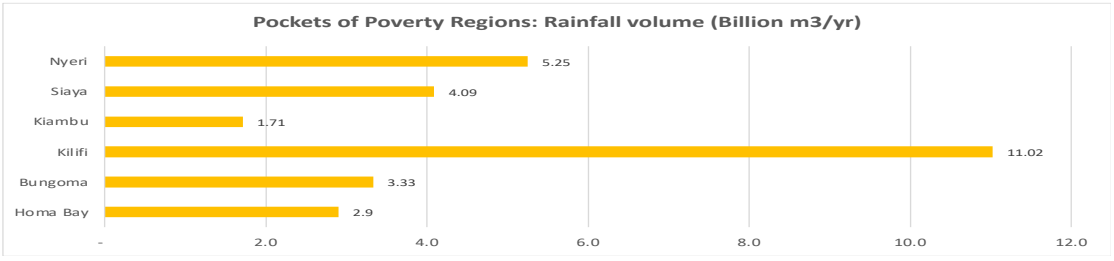


Figure 5-7*: Annual rainfall distribution (in volumes) of counties with pockets of poverty regions*

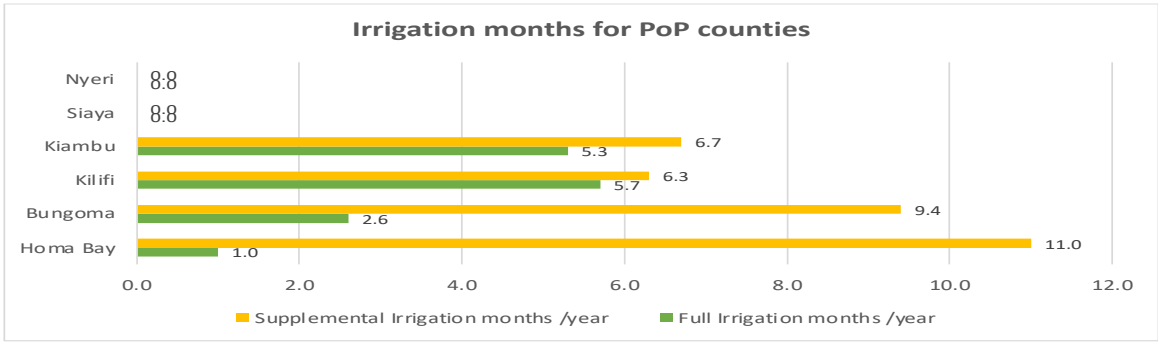


Figure 5-8: *Supplemental and full irrigation months for counties with pockets of poverty regions*

3.2.5.3 Analysis of precipitation baselines for counties with Urban Informal Settlements

Nairobi and Machakos are counties with urban informal settlements within the IMPReSED Programme. Not much of farming is done in the urban areas owing to limited agricultural lands. Although Nairobi seems to have low volumes of renewable runoff water generated from rainfall (0.7 billion m^3), this is still a lot given the small area of Nairobi in comparison to other counties in the IMPReSED Programme. Owing to high areas that are on built infrastructure i.e. roads, buildings, pavements etc, there is good potential for ground water recharge. However, since the IMPReSED Programme focuses on schools, runoff captured from roof catchments shall be harnessed and stored in Sausage tanks. If there is room for ponds, then mini vegetable farms, some of which will be in vertical gardens or greenhouses will be utilized.

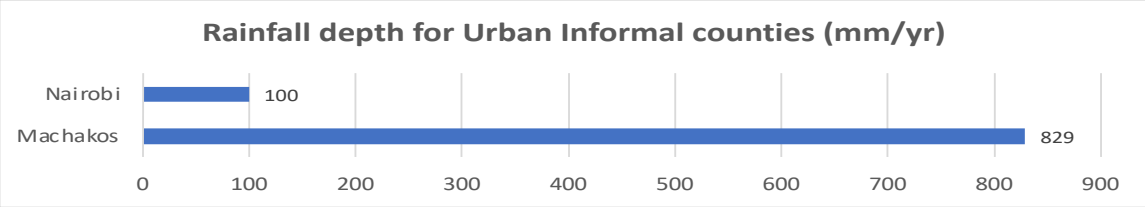


Figure 5-9: *Rainfall depth for counties with Urban Informal Settlements*

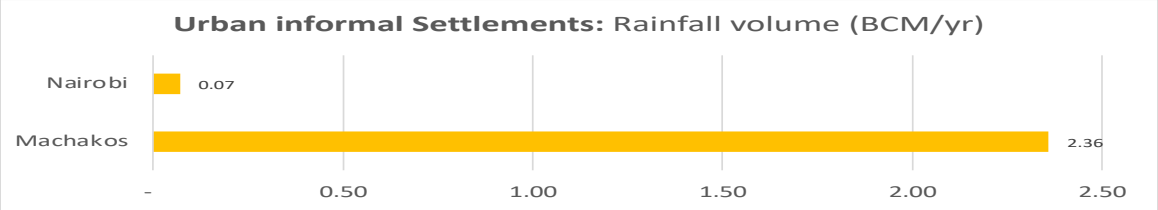


Figure 5-10: *Rainfall volumes for counties with Urban Informal Settlements*

3.2.6 Surface runoff

NACONEK opted to use Georeferenced Information Systems to profile the thematic attributes which shall be monitored periodically to evaluate their trends. Given the short five-year span of the Programme and the scale at which interventions will be executed, dynamic attributes such as temperatures, radiation and humidity will be compiled using both global data sets and Internet of Things (IOT) sensor techniques. Indeed, automation stations shall be installed in super model and model sites to provide key information / data necessary for precision farming as well as efficient industrialization.

Fixed physical attributes such as soils, slope of land, wetlands, waterways and water bodies have been captured using open-source GIS databases. The biological attributes such as land use land cover – LULC (e.g., tree/forest canopy, grasslands, croplands, built environment and denuded lands) and livestock et cetera, were also mapped using GIS technology.
Soil Conservation Service Curve Number tool was used to compute and assess the amount of surface runoff falling over areas based landuse landcover, hydrologic soil groups, and antecedent soil moisture conditions within the LULC boundaries (See equations 1, 2, 3 and matrix on hydrologic computations).

Analysis of rainfall and runoff volumes shows that the Programme area receives renewable rainfall of 1.76 trillion m^3 out of which 1.47 trillion m^3 is converted as runoff. ASAL counties generally have large amounts of renewable rainfall as well as runoff compared to counties with pockets of poverty. This can be attributed to the huge land sizes. It is however important to note that rainfall events in the ASAL counties is much fewer and thus IMPReSED Programme will design reservoirs to buffer adequate ground runoff water that can be used in production the of biomass from agro-silvi-culture that is about 1 million litres will be constructed. This has been demonstrated in Kuno model school through the construction of truncated pyramid ponds[3]. Schools also have large roof water catchments. In semi-arid areas with precipitation above 400mm per year, roof water can be harvested and stored in underground reservoirs such as Sausage or Spherical tanks which are enclosed and hidden from evaporation losses.

[3] A Truncated Pyramid Pons is a surface reservoir sloped sides on all four sections. It resembles an inverted prism whose apex is cut off. This reservoir is often lined with geo-membranes to impede seepage losses

Truncated pyramid ponds are reservoirs that have a shape of an inverted prism with a rectangular base whose apex is cut off (truncated). The ultimate share is that of a cuboid with sloped sides. The sides of the pond are often lined using geo-membranes (pond liners) of 0.8 to 1mm thickness, and covered with shade-nets of about 80% opacity. For siting, the drier the place, the larger the reservoir size. Such ponds are already common especially in the semi-arid regions of Kenya, as introduced by the World Agroforestry Centre (ICRAF) under the drylands development programme (DRYDEV). Sizes range from <50 - 250m^3 volumes in the sub humid areas, 250m^3 to 1000m^3 in the semi-arid areas and >1000m^3 in the arid areas.

The table and figure below provide more details of rainfall-runoff comparisons for each of the 12 counties of the IMPReSED Programme. Most of the runoff is not harvested and stored for immediate or future use. A potential that still remains largely un-tapped.

Table 5.2: *Rainfall depths and volumes for the 12 focal counties*

#	County	Rainfall Volume (BCM)	Runoff Vol. (BCM)	Runoff coefficent
1	Turkana	232.3	194.6	0.84
2	Samburu	82.2	69.6	0.85
3	Mandera	118.4	101.5	0.86
4	Wajir	194.0	166.9	0.86
5	Garissa	258.6	236.3	0.91
6	Isiolo	74.9	63.0	0.84
7	Marsabit	259.6	229.9	0.89
8	Tana River	249.3	225.7	0.91
9	Narok	69.3	61.3	0.88
10	Kajiado	51.2	41.5	0.81
11	Homabay	10.4	9.6	0.92
12	Bungoma	17.2	13.0	0.75
13	Kilifi	99.7	21.7	0.22
14	Siaya	12.7	11.8	0.93
15	Machakos	10.7	9.0	0.84
16	Nairobi	2.2	1.9	0.86
17	Nyeri	11.1	9.4	0.85
18	Kiambu	7.9	6.9	0.87
TOTAL		1761.6	1473.4	

3.2.6 *Surface water bodies*

The Programme area is traversed by perennial rivers which are crucial for providing water to replenish runoff stored in ponds after use especially for irrigation purposes, or directly pumped for domestic use – i.e. water for drinking, washing, sanitation and hygiene purposes.

These include; Turkwel and Kerio rivers in Turkana County; River Tana traversing Garissa and Tana river counties; Athi river traversing Machakos county; Ewaso Ng'iro traversing Marsabit and Wajir counties as well as Nzoia and Yala rivers traversing Bungoma and Siaya counties.

The Programme proposes to liaise with the Water Resources Authorly as well as NEMA to approve the sustainable abstraction of perennial river waters for domestic, sanitation, hygiene and agro-silvi-pastural production through supplementary of full irrigation.

3.2.7 *Soil types*

Soil types is best represented in the soil texture triangle as shown in the figure below. The major soil types in the IMPReSED Programme areas are; Sandy clay loam, Sandy clay and clay.

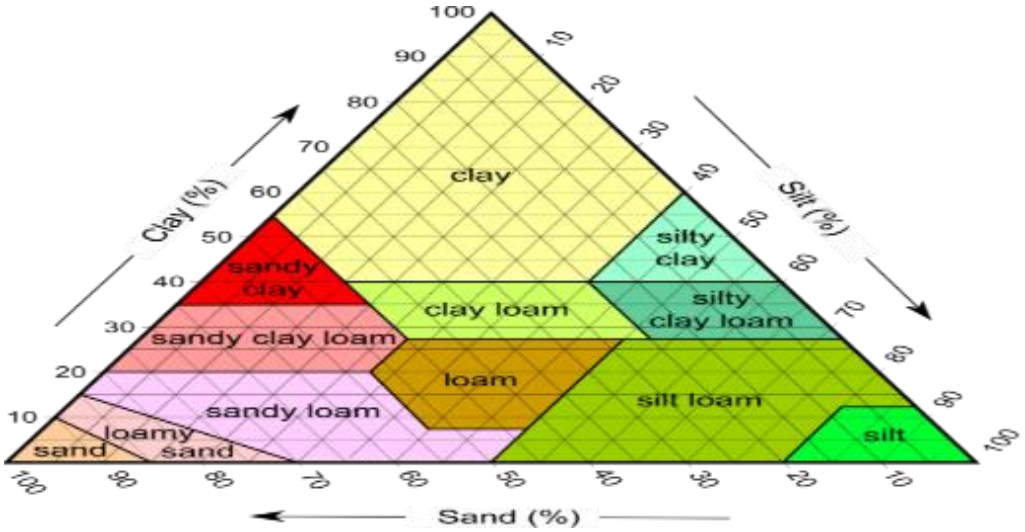


Figure 5.11: *Soil Texture Triangle*

3.2.8.1 Sandy clay loam

The dominant soil type in the arid and semi arid counties of the IMPReSED programme is the Sandy clay loam. This soil has a texture of approximately > 45 - 80% sand, < 27% silt, and >55% clay. Thus, it is mainly found in Turkana, Samburu, Mandera, Garissa and Marsabit Tana river, Kajiado, and Kilifi counties. However, Isiolo and Marsabit have a combination of Sandy clay loam and Sandy loam.

The sandy clay loam has a moderate ability to hold nutrients, with less leaching. Low levels of macro nutrients such as phosphorus, calcium, potassium, sulphur, nitrogen and trace elements of copper and molybdenum have been documented to occur in such soils. Surface soils are the most fertile and have the highest levels of organic matter.

3.2.8.2 Clay loam

Clay loam has a texture of approximately 20% – 45% sand, 15% - 50% silt, and 55-80% clay. It is only found in Nyeri and Bungoma counties. The higher percentage of clay content influences the characteristics of clay loam soil. When wet, clay swells to retain water. This makes it difficult to work with. When dry, clay shrinks but stays packed, forming clods and cracks on the soil surface. These disadvantages can be reduced by gradually adding organic matter.

Usually clay loam contains a good deal of plant nutrients and supports most types of plants and crops. Clay loams can be improved to create better drainage without too much difficulty. In some wet weather or climates, the drainage problems may be harder to overcome.

Probably the best way to improve clay loam is to regularly add organic matter in the form of compost or humus. Another good idea is to dig in more bulky matter, such as shredded leaves. This will help to keep clods from forming when dry. When wet, it will allow more water and air to pass through, leading to a less packed, better drained texture. As clay already contains a good deal of nutrients, improving the texture makes it a perfectly good soil mixture for most plants.

3.2.8.3 Clay

Clay has a texture of approximately <45% sand, <40% silt, and >55% clay. It is mainly dominant in Homa Bay, Kiambu, Siaya and Nairobi counties. Fortunately, they occur in Urban based counties where agriculture will be minimal. Clay soils have very high water-holding capacity, and highly rich in humus content. However, this water tightly adheres to the soil particles, making them un available to plants and difficult to plough.

3.2.9 Land degradation

Baseline studies on land degradation was based on information drawn from ArcGIS, focusing largely on soil quality. Land degradation is influenced by the following factors; soil type, slope, vegetation cover and rainfall amount and intensity. When the rain drops hit ground surface where there is minimal or no canopy cover, clay soils are easier to entrain while sandy soils are difficult to entrain due to their heavy weights. For the slope factor, the flatter the ground, the less the erosion and vice versa.

The land degradation map shows that at 214,099 km^2, the areas with very low to low degradation levels account for 47.8%. This is approximately 50% of the Programme area, with northern frontier and coastal counties (Southern & Eastern Marsabit, Mandera, Wajir, Garissa, Tana River, Kilifi and Kwale) being in this category. The worst hit areas with very high levels of land degradation include the whole of Turkana County, western strip of Samburu and North Eastern zones of Marsabit, which have sandy clay loam soils.

This means that the areas are poor in carbon sinks as there is very low vegetation establishment. The IMPReSED Programme will design site specific soil conservation and fertility amelioration interventions to boost biomass production, and thus contribute towards high coverage of green biomass with enhanced carbon sinks to boost sequestration levels. *See figure 5- 12*

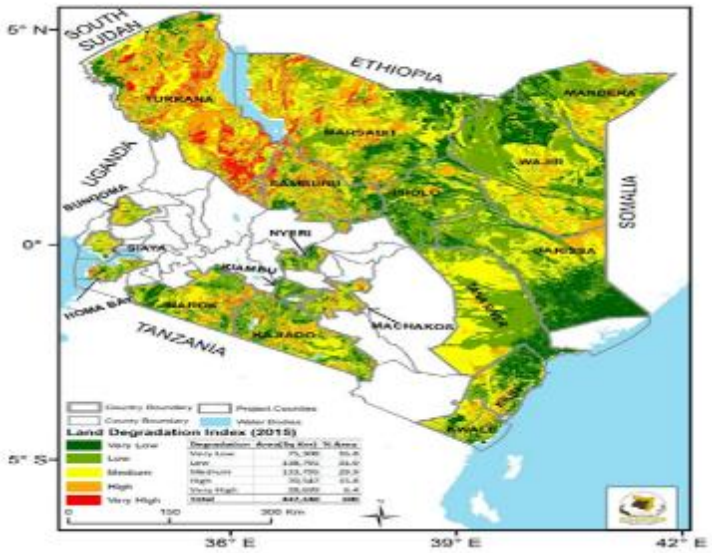


Figure 5-12: *Land degradation map of IMPReSED counties*

3.2.10 Vegetation Cover

NACONEK consulting team generated vegetation cover maps and related information using Geographic Information Systems. Analysis of these maps depict large swarths of shrubland for

the ASAL counties within the proposed IMPReSED Programme, totaling 247,353 km^2 (63% of the IMPReSED focal area) This is closely followed by grasslands, which occupy 88,538 km2, constituting 22% of the IMPReSED focal area. This means that 85% of the Programme area is good for livestock production (See table and graph below). However, with irrigation, a pilot conducted by NACONEK from mid 2019 to end of 2020 proved that it is possible to generate massive biomass from *Gliricidia sepium* which is a leguminous shrub.

Table5.3: *Vegetation Cover for the 12 focal counties*

Land Use Land Cover (Km2)	Arid	Semi Arid & PoP	Urban Informal Settlements	Total	%
Trees	29404	7604	263	37271	9
Cropland	3527	1782	525	5834	1
Grassland	84771	3488	279	88538	22
Shrubland	243369	2062	1922	247353	63
Bare / Built	14579	572	558	15709	4
Total	375650	15508	3547	394705	100

3.2.11 Land use cover

Cropland occupy a meagre 6,345 km^2, equivalent to 1.4% of IMPReSED land mass. The Programme will therefore give credence to this fact by boosting livestock production interventions such as pasture for peace; milk, meat and honey for industrialization, food security and income generation (See map below).

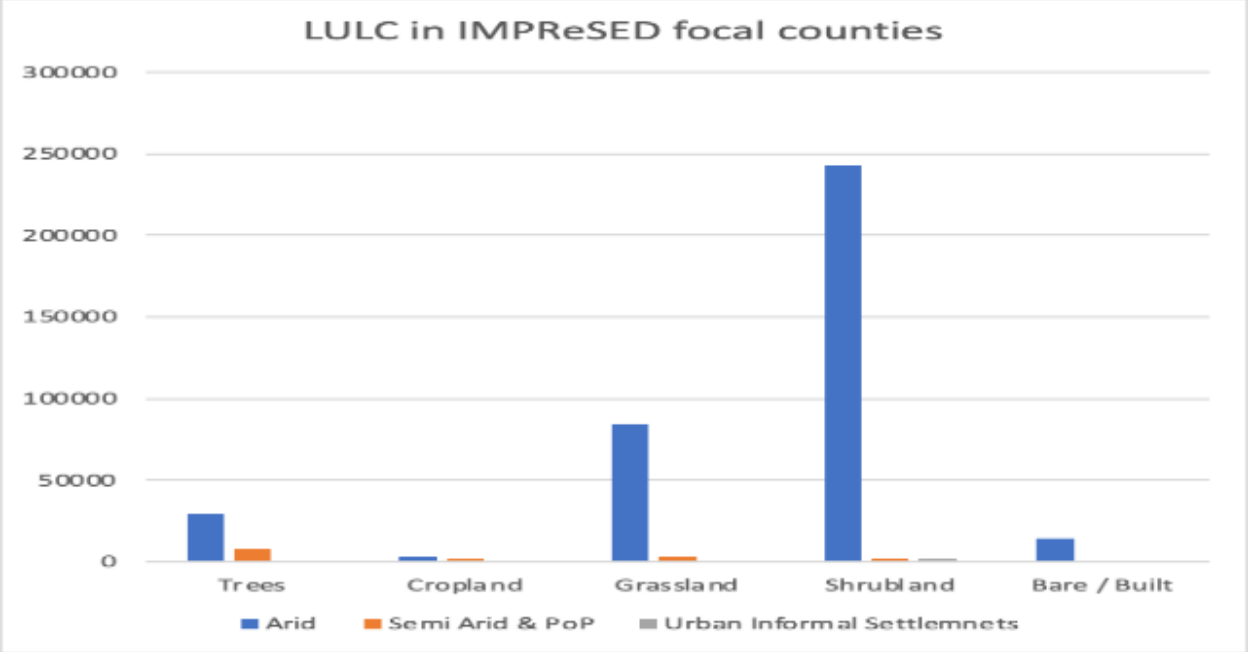


Figure 5.13: *Land Land Cover in IMPReSED counties*

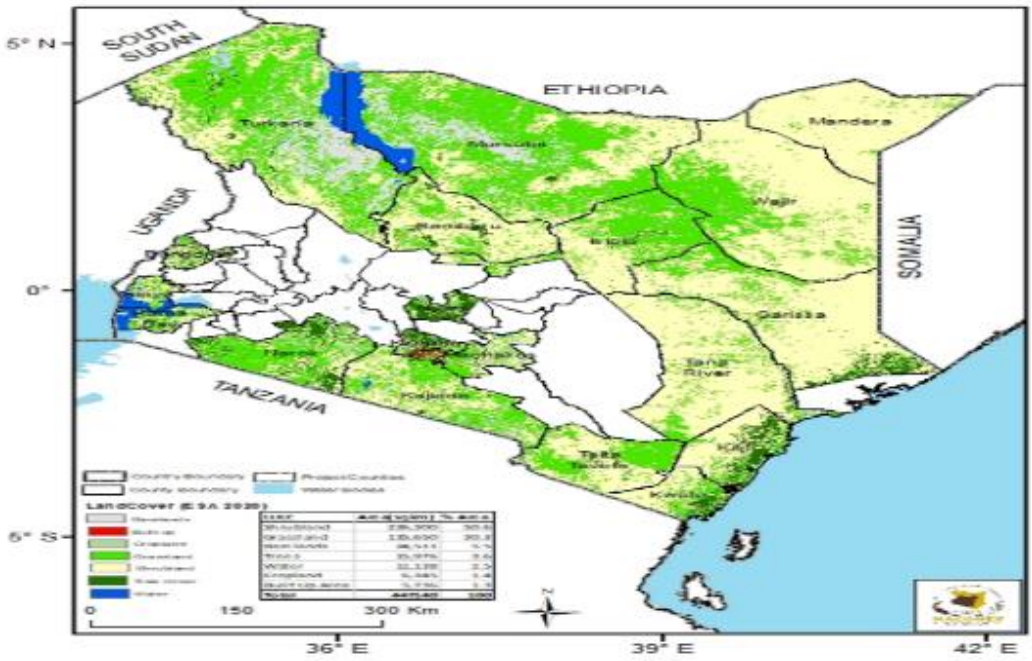


Figure 5.14: *Land cover map of IMPReSED counties*

3.2.12 Pastural production

From the land cover map of IMPReSED counties, it is quite clear that the two dorminant landcovers are shrubs at 50% of landmass, and pasture / grass at 30%. The pilot conducted in Kuno model school tried out *Gliricidia sepium* and Sorghum Sudangrass both as fodder for livestock. Following their good performance, the Programme proposes to scale out their establishment across 12 counties. Their eco-physiology is presented below.

i. Eco-physiology of Gliricidia sepium

Gliricidia sepium is a medium-sized tropical tree that grows to 10–12 m height. In Kenya the color of its bark is usually whitish gray. The flowers of the *Gliricidia* plant are located at the end of its branches that have no leaves. These flowers often are bright pink to lilac color with a tinge of white. It produces a pod that is about 10–15 cm long. The pod is green when unripe and turns to yellow-brown at maturity. Each pod produces between four to ten round brown seeds.

Although *Gliricidia* grows well in acidic soils with a pH of 4.5-6.2, it can also grow on sandy, clay and limestone soils.

It has multiple uses which include: fodder for cattle and shoats with 2 – 4 months tolerance of cuttings; inter-cropping for nitrogen fixation; soil stabilization as erosion control measure owing to its rapid propagation; live fencing; firewood/fuelwood and potential for making briquettes, green manure, rodenticide and insecticide.

For its cultivation, *Gliricidia* requires the presence of pollinators such as bees especially in dry seasonal conditions. Thus, according to the eco-physiology of *Gliricidia sepium* and also based on its promising growth performance as well as its economic potential, this tree portends good scalability across all the 12 counties proposed for the IMPReSED Programme.

Gliricidia sepium has proved beyond any reasonable doubt that it is feasible to rapidly establish green biomass with high potential of curbing GHG emissions. This shrub has been introduced in western Kenya counties of Trans Nzoia, Bungoma, Kakamega and Siaya counties, indicating that it can thrive well is a wide range of climatic zones.

ii. Eco-physiology of Sorghum Sudangrass

Sorghum Sudan grass is a hybrid cross between forage-type sorghums and Sudan grass. It is tall, and grows very fast to between 1.5m to 4m height within a 6-week period. These features combine to produce ample biomass, usually about 1.8 tons to 2.3 tons of dry matter per acre. With multiple cuttings, the total biomass has been estimated to attain 8.2 tons of dry matter per acre on fertile soils with adequate moisture. Other than its use as a fodder, some of benefits accrued from Sorghum Sudangrass are its capacity to suppress weeds and disrupt the life cysles of nematodes. This is a good characteristic of the grass in respect to enhancing crop health and therefore contributes towards higher productivity. For its sowing the grass requires soils with neutral pH. Its seeding is done at a rate of 18 to 23 kg/acre.

3.2.13 Social Economic Baseline

A study carried out by NACONEK in 2019 on the impact of climate change on the sustainability of low-cost boarding schools in arid and semi-arid lands and pockets of poverty regions in Kenya picked up the dire need conditions of schools in these regions and also highlight the climatic conditions that contribute to unintended socio-economic consequences including increasing the number of out of school going children (OOSC). The study focused more on arid regions whereas IMPReSED puts into consideration arid regions and both semi-arid and humid regions which are all the Eighteen (18) target counties.

Furthermore, all the target county regions have also done their own specific socio-economic reports that are found in their specific county integrated development plans (CIDPs). This study will therefore make use of the existing county integrated development plans to write the social-economic baseline of all the Eighteen (18) target counties of Turkana, Samburu, Mandera, Wajir, Garissa, Isiolo, Marsabit, Tana River, Narok, Kajiado, Homa Bay, Bungoma, Kilifi, Kiambu, Siaya, Nyeri, Machakos, and Nairobi all falling under what we refer to as ASALs, Pockets of Poverty (PoPs), and Urban informal Settlements (UiS) a NACONEK mandate area.

A) IMPReSED Social Economic parameters

IMPReSED social economic baseline recognizes the importance of relationships between people, culture, economic activities and the biophysical environment of the target counties. Several factors were considered in writing this study. The table below provides a list of the parameters that were put into consideration.

Table 5-4: *Table on Social Economic Parameters Considered*

SOCIAL ECONOMIC PARAMETERS						
	Social Factors	a) Population Demography	Men (35+)			
			Women (35+)			
			Male Youth(18-35)			
			Female Youth(18-35)			
			Teens(13-19)			
			Children(0-5)			
			Children(6-12)			
		b) Education Levles	Literacy Levels			
			Public Primary Schools available			
			Secondary Schools available			
			Universities & Colleges available			
		c) Settlements				
		d) Food Security		Carbohydrates	Vitamins	Proteins
			Availability			
			Accessibility			
		e) Health Care				
2	Economic Parameters	a) Income Levels				
		b) Unemployment rate				
		c) Infrastructure	Road Network			
			Markets/Towns/Centres			
		d) Energy	Charcoal			
			Fuel			
			Electricity			
			Gas			

Further, the social economic baseline examined in detail each the Eighteen (18) target county specific social economic aspect as per the above parameters and a table summary is provided below.

Table 5.5: *Summary Table on some of the selected Social Economic Baseline*

SUMMARY OF SELECTED SOCIAL ECONOMIC PARAMETERS															
	County	NO of OOSC	NO of Schools		Population			Health Care				Road Network(in Km all types)	Markets	Arable Land(Ha)	Unemployment Rate(%)
			Primary	Secondary	Male	Female	Total	Hospitals	Health Centres	Dispensaries	Total				
ASALS															
1	Turkana	144,520	315	32	478,087	448,868	926,955	4	9	71	84	5,496.2	3	2,500,000.0	70.0
2	Samburu	36,690	149	19	156,774	153,546	310,320	3		-	3	1,449.0	4	139,892.0	45.0
3	Mandera	170,050	175	32	439,976	432,444	872,420	6	9	24	39	18,884.0	6	716.6	69.0
4	Wajir	152,130	218	41	415,374	365,840	781,214	10	26	79	115	28.0	5	3,120.0	62.6
5	Garissa	166,010	209	33	469,489	403,155	872,644	7	68	-	75	2,700.6	6		28.4
6	Isiolo	22,080	108	25	84,748	77,625	162,373	1	51	36	88	1,275.5	8	1,500.0	70.0
7	Marsabit	58,820	181	43	243,548	216,219	459,767	4	20	63	87	5,000.0	6	5,060.0	65.0
8	Tana River	26,080	152	13	157,282	156,092	313,374	2	5	40	47	3,377.0	10	7,527.0	42.8
9	Narok	1,745	664	138	570,936	559,740	1,130,676	11	36	110	157	4,602.0	10	252,880.0	3.8
10	Kajiado	177	514	114	557,098	560,704	1,117,802	4	16	60	80	2,344.2	4		10.5
	TOTALS	**778,302**	**2,685**				**6,947,545**								
Pockets of Poverty - PoPs															
11	Homabay	7,170	180		539,560	592,367	1,131,927				-	3,443.0	103	207,685.0	74.0
12	Bungoma	1,459			812,146	858,389	1,670,535	17	14	102	133		23	201,654.0	60.0
13	Kilifi	18,740	543	196	704,089	749,673	1,453,762				-	10,100.0	72		66.0
14	Nyeri	1,430			374,288	384,845	759,133	6	25	88	119	3,092.7	52	80,943.0	17.5
15	Siaya	4,690	636	179	471,669	521,496	993,165	7		113	120	2,185.3	6		40.0
16	Kiambu	4,790	476	271	1,187,146	1,230,454	2,417,600				108	5,533.0	118	21,447.0	60.0
	TOTALS	**38,279**	**1,835**				**8,426,122**								
Urban Informal Settlements															
17	Machakos	5,010	896	301	710,707	711,191	1,421,898	5	32		37		9		54.0
18	Nairobi	17,900	205	95	2,192,452	2,204,376	4,396,828	45	141	200	386	3,602.0	282		14.7
	TOTALS	**22,910**	**1,101**				**5,818,726**								

3.2.14 County Specific Baseline for Social Economic Conditions

3.2. 14.1 ASAL Counties -

3.2.14.1.1. Samburu County

The Population demographic for Samburu is 156,774 male and 153,546 female. The country currently has 149 Primary schools 19 secondary schools and 5 TVETs. Only 27 percent of the population have the ability to read and write. The overall literacy level of the county is low with 27 percent of the population have the ability to read and write. The county has 2 MSEA

CIDC facilities with construction completed. The number of hospitals is three and one in three children (42%) in the County is stunted, making the nutritional status very urgent.

The road network is 1,449 kilometres most of which are rural access roads. Samburu's main crops produced are maize, beans, wheat, barley and millet. The acreage under food crops and cash crops are 4,000 ha and 3,200 ha respectively. Main livestock breeds include indigenous cows, goats, sheep, camels, and donkeys. The average farm size is 0.4 ha per household. Unemployment levels are high 45 percent of its population unemployed majority of whom are youths aged between 18-35 years.

3.2.14.1.2 Mandera County

The population level of the county is 434,976 male and 432,444 female. Mandera has 175 public primary schools, 32 public secondary schools and 5 TVETS. The Literacy level is at 25.4 per cent. The county currently has 3 MESAs CIDCs facilities completed but not occupied. The county has six Level IV facilities in the county, nine level III facilities, 24 Level II facilities, six Nursing homes and 60 Private clinics. Currently there are 31.8 per cent of children chronically undernourished. Firewood, which is used by 95.6% of the house holds, is the main source of Energy access.

The road network consists of 1,884.5 km of road network. There is no bitumen surface in a majority of the county. Main Crops Produced are maize, sorghum and cowpeas, simsim for oil. Acreage Under food Crops and Cash Crops includes 716.58 hectares. The county's Markets and Urban Centers consist of six markets/urban centres. Main Livestock Breeds are goats (galla breeds), cattle (boran breeds), camels Somali breeds), sheep (Somali black head breeds), donkeys (Somali breed) and chicken (indigenous breed). Unemployment levels are at a high level of 69 percent.

3.2.14.1.3. Wajir County

The Population demography is 415,374 male and 365,840 female. The education institutions include Primary schools 218, 41 secondary schools, and 9 polytechnics. The literacy level is at 23.6%. The county currently has 4 MSEA CIDC facilities 90% completed. Access health facilities include 115 public health facilities, 29 private facilities and 2 facilities run by NGO/missions. There are 26% of children under age five in the county are stunted. As far as energy access for cooking (98.4) per cent of the county households depend on wood fuel (Firewood and Charcoal)

The road network access includes 28 Kilometers of tarmac. The main crops produced are sorghum, drought tolerant maize, beans with 3,120 Ha of land used for food and cash crops. Main livestock breeds include Borana type and dairy crosses), sheep, goats (dominantly Totenberg goats), camels and donkeys. Unemployment Levels are at 62.6 percent for the county.

3.2.14.1.4. Garissa County

The population demography is 468,489 males and 403,155 females. Garissa education insttitutions include 209 Primary Schools and 33 Secondary Schools, 5 TVETS. Garissa has 3 MESAs CIDC facilities almost completed. Last reported the illiterate level at 74 per cent. There are 205 health facilities in the county at various levls but currently 29% of children under age

five in the county are stunted. Eergy access is low, with 84% of the county's population use fire wood as a source of energy.

The road network is 2,700.6 km through out the county, but it is rowing rapidly. The markets and Urban Centers in the county include six urban & commercial centres, 19 market centres. The main crops produced include farming near the Tana River which are watermelons and sweet melon, mangoes, vegetables, tomatoes, paw paws, bananas, cowpeas, simsim, rice, sorghum, maize and green grams. The acreage under food crops and cash crops are 7,200 Ha. Average farms sizes are 1.5 hectares. The main livestock breeds include cattle (Boran), goats (Galla), sheep (black headed Persian) and camel (dromedary one humped). Other agricultural activities include bee keeping activities, Garissa County has a 20 km stretch of the Indian Ocean for fishing. Unemplyment levels are at 28.4%.

3.2.14.1.5. Marsabit County

The county has a population demography of 243,548 male and 216,219 female. The learning institutions include 231 primary schools, 43 secondary, eight vocational centres. The illiteracy is level at 75 percent. The county has 3 MSEA CIDC facilities completed. Marsabit county has 2 FBO Hospitals,1 Private hospital, 20 health centres 63 dispensaries, 4 Nursing homes,12 private clinics. Currently though, 31 per cent of the children below five years are malnourished. Fire wood and charcoal are the main use for cooking fuel, and 92.6% of households depend on it.

The Road network is about 5,000 km. Bilateral trade agreements between the Kenya-Ethiopia governments seek to increase growth of markets and export of goods There are 5 Urban centers in the county. Main Crops Produced include fruits and vegetables, maize, teff, beans and millet with 5,060 Ha of aceage used for food crops and cash crops. The county has 420,000 cattle, 2,029,490 goats, 1,851,452 sheep, 217,360 camels, 81,900 donkeys and 45,860 chicken. There are 5,890 beehives/apiaries in the entire county. The unemployment levels are at 65%.

3.2.14.2 Pockets of Poverty Counties

3.2.14.2.1 Homa Bay County

The population demography of the Homa Bay county is 557,098 were men and 560,704 females. There are 372 primary schools, 180 secondary schools, and 50 Youth Polytechnics. The literacy level is 92 percent literate. The county has 3 MSEA CIDCs facilities with construction ongoing. The county has 262 health facilities are various levels. The malnutrion levels foe children under five is 35%. About 85% of households use firewood for cooking.

There are 103 active major markets, 4 Urban Centres - Homa Bay, Mbita, Kendu Bay and Oyugis. The main crops produced are maize, beans, green grams, sorghum, finger millet, kales, cassava, sweet potatoes and cow peas. There are 207,685 hectares used under food crops and cash crops. The main lifestock breeds East African zebu for meat, milk and draught power, meat and dairy goats, indigenous poultry, indigenous sheep and to some lesser extent dairy animals. Fish activities include the main breeds for export, Nile perch (L. Niloticus) which accounts for 37,000 Metric tons annually and dagaa (R. Argentae) accounting for 34,000 metric tons annually. The unemployment levels are at 20.5 %.

3.2.14.2.2. Bungoma County

The population demography is 930,829. There are 961 Primary Schools, 306 Secondary Schools, and 5 polytechnic centers. The literacy levels are at 60%. The county has MSEA

CIDCs facilities constructed and rehabilitated. Bungoma county has 11 hospitals, 19 health centres, 96 dispensaries and 178 clinics. 85% of households use firewood and 11% use charcoal as cooking fuel.

There are 350 market centres open and running. The main crops produced are maize, beans, finger millet, sweet potatoes, bananas, sorghum, irish potatoes and assorted vegetables. Sugar cane, cotton, palm oil, coffee, tea, sun flower and tobacco are grown as cash crops in the County. There are 201,654.6 ha used for food crops and cash crops. The main livestock breeds are cattle, sheep, goats, donkeys, pigs, rabbits, poultry and bees. The unemployment level is at 28.5 percent.

3.2.14.2.3. Kilifi County

The population demography is 704,089 are male and 749,673 are female. There are 756 primary schools, 249 secondary schools, and 28 youth polytechnics. Even so, the illiteracy rate 59.2 percent. The county has MSEA CIDCs facilities constructed and rehabilitated. There are health facilities in the county but 18.2% of children under five years are wasted and underweight. In Kilifi, 80% of the population in the county relies on wood fuel.

The road network is about 101,000 km. There are 78 trading centers and open markets. The main crops grown are maize, cassava, green grams, cow peas, rice and bananas. There are average 10 cattle per household. Potential for blue economy investment is high, arising from is 265km long Indian Ocean coastline. Even with the growing potentional the unemployment rate is at 67.5 percent.

3.2.14.2.4. Siaya County

The population demography of Siaya is 471,669 male and 521,496 female. There are 652 primary schools, 237 secondary schools, seven tertiary institutions. The Basic literacy rate stands at 80 per cent. The county has MSEA CIDCs facilities constructed and rehabilitated. There are 213 health facilities in the county. The nutrional status reports 252,770 children under five years, with stunting level. The household using firewood is at 84.2 per cent.

There are 434.2km of bitumen standard roads and 221 active market centres in the county. The main crops produced are maize, sorghum, millet, beans, cowpeas, cassava, sweet potatoes, groundnuts and finger millets while the main cash crop include cotton, rice, sugar cane and groundnuts. The are about 56,447 Ha used under food crops and cash crops. Average farm sizes are small-scale farmer is 1.5 ha and 7.0 ha for a large-scale farmer. There are 2-3 cows under zero grazing systems per household. The main activities in the fisheries sub-sector are capture fisheries in Lake Victoria, Lake Kanyaboli as well as dams and fisheries aquaculture undertaken in fish ponds. Unemplyment rate is approximately at 40%.

3.2.14.3 Urban Infromal Settlements

3.2.14.3.1. Machakos

The county population demography is with 710,707 males and 711,191 females. There are 896 public primary schools, 301 public secondary schools, 147 private primary schools, 73 private secondary schools. The total health facilities in the County are 367. The under five years malnourished are at 27% followed by underweight children, wasted children and overweight children. The main source of energy for cooking and lighting is still firewood.

The road netword is very developed. The main cash crops are are coffee, mangoes, citrus, French beans, pineapples, flowers, sorghum and vegetables. The food crops grown include maize, beans, pigeon peas, green grams, cowpeas and cassava which are cultivated in small scale. 75% of the land in Machakos County is used for agricultural purpose. About 20% of the total land of Machakos County is cultivated. Average farms sizes are small scale and large scale farming are 0.756Ha and 10Ha respectively. The unemployment rate in the County is high due to increasing level of labour force with unmatched slowly growing commercial sectors.

3.2.14.3. 2. Nairobi

The population demography of Nairobi is 2,192,452 males and 2,204,376 females.

There are 205 public primary schools,152 secondary schools. 96.1 per cent of the population can read and write while 2.8 percent of the population cannot read and write. There are 45 hospitals with a bed capacity of 6,990. There are 141 health, 200 dispensaries and 551 Clinic. Stunting levels for children less than 5 years is 17 percent while the proportion of children who are wasted stands at 3 percent. 63.2 per cent of the population use paraffin as cooking fuel.

The road network is very developed. There are various types of markets namely; open air markets, self-constructed markets, development tenant purchase markets, rental markets, hawkers markets and wholesale markets. Main crops are tomatoes, kales, spinach, cabbage, local vegetables, onions, capsicum and carrots. Fruits grown include passion fruits, mangoes, bananas and avocado. Unemployment is are 14.70 per cent.

3.3 Site Specific Baseline Information

This baseline was extracted from both site consulations and surveys as well as site geo-mapping. The site baseline covers detail on the school population; physical setup of structures; condition of buildings/classrooms and sanitation facilities; size of school land; topographical information; vegetation cover; characteristics of the surrounding community. The programme identifies 12 Counties and 43 Learning institutions including: 35 Primary schools (Lowcost Boarding Schools and Day Schools), 1 Secondary Girls School and 7TVETs participating in this programme.

3.3.1 10 ASAL Counties:

This includes 4 sites per county: 3 Primary Schools and 1 TVET. A total of 20 learning institutions will be engaged in this programme.

County 1: Marsabit

Subcounty: Saku

Site 1: Saku VTC

Coordinates: 2.287571°, 38.084838°

Baseline conditions: The school has a population of 110 learners. The land size is about 4.73 acres, 11 single story buildings classrooms, bathrooms, administrative block, but no fencing, the condition of the buildings are normal. It is a Dispensary near by. It has less that 2% vegetation cover. It is not near a water source. Surrounding community density is scarce in a rural setting. The average annual percentage of humidity is: 60.0%. Soils are clayey thus with high water holding capacity.

Subcounty: North Horr

Site 2: Helmer Memorial Girls Primary School

Coordinates: 3.321217, 37.058612

Baseline conditions: Helmer **Site 2:** Helmer Memorial Girls Primary School has a population is 397 girl learners. The school has an area of 4 acres with a perimeter of 498m.. It is close to

an intermittent river / Laga and therefore with a potential of seasonal Ground water body. The school compound is bare – with surrounding vegetation cover of less that 5%, surrounding vegetation is mainly riverine trees.

Subcounty: North Horr
Site 3: Dukana Girls Primary School
Coordinates: 2.337843°, 37.991607°
Baseline conditions: Site 3: Dukana Girls Primary School has a population 491 learners. The school has an area of 7.22 acres with a perimeter of 713m. The school is located in town along a tarmac road. It has 9 distinct buildings including a mosque. The surrounding vegetation cover is about 10%.
.
Subcounty: Saku
Site 4: Segel Primary School
Coordinates: 3.322623°, 37.072309°
Baseline conditions: Site 4: Segel Primary School is located in Saku, Marsabit. It has an area of 4.46 acres with a perimeter of 548m. The school is bare with less than 10 trees. The soils are sandy there. Segel Primary school has 6 major buildings and toilet facilities. Vegetation cover in Saku locality is less than 10%.

County 2: Mandera
Subcounty: Mandera Central
Site 1: Fincharo Primary School
Coordinates: 2.926767°, 40.505349°
Fincharo Primary School with a population of 522 has an area of 16 acres with a perimeter of 1065m (1.065km). However, the area that is centrally occupied by buildings is about 2.33 acres. Vegetation cover for Mandera Central locality where the school is based is about 30% based on the acacia shrub There is no indication of water supply through pipelines or boreholes. However, there is a laga (river bed) barely 700m away from the school. This is a likely potential for borehole drilling.

Subcounty: Mandera North
Site 2: Mado Primary School
Coordinates: 3.973086°, 41.113808°
Mado Primary School in Mandera has an area of 19.4 acres and a perimeter of 1056m. Its population is 300 pupils. It only has two buildings one of which has solar PV Panels. The school is 3km from Dawa river which is a potential source of ground water. The trees and green biomass near the school are indeed part of the laga system.

Subcounty: Mandera East
Site 3: Mandera Technical Training Institute
Coordinates: 3.973086°, 41.113808°
Mandera TTI has an area of 9.15 acres and a non-fenced perimeter of 773m. The population for the institute is 573. It has 15 distinct buildings and located right in town centre besides a tarmac road. The TTI is 2.6 km away from Dawa river where it can draw its water using a riverine borehole.
County 3: Garissa
Subcounty: Bura east
Site 1: Bura Boarding Primary School
Coordinates: -1.090075, 39.946345

Bura Primary school has an approximate area of 50 acres and a perimeter of 1826 m with no definite fence. The schools population is 560. It has 10 Units of school building and 8 units of accommodation facilities. It is bare with no irrigation going on. The buildings are centrally located. The average annual percentage of humidity is: 60.0%. This school is only 1.1 km from Tana River where it can draw its water from riverine borehole. Vegetation is more of scrub land with less that 10% ground cover.

Subcounty: Balambala

Site 2: Raya Primary School

Approximate Coordinates: 3.973086°, 41.113808°

So far Google Earth is not capturing Raya Primary School whose population is 264. However, the approximate location for the school is 0°17'42.89"S, 39°40'58.11"E. The average annual relative humidity is 72%, but in November and December, the peak can rise. The average rainfall is about 310mm.

Subcounty: Hulugho

Site 3: Ege Primary School

Approximate Coordinates: 3.973086°, 41.113808°

Google Earth is not capturing Ege Primary School whose population is 378. However, it is capturing Hulugho Sub- County Hospital coordinates and not the buildings. Thus, the assumption is that the Hospital is within Hulugho centre, where the Primary School may also be located. Vegetation is more of scrub land with less about 60% ground cover.

Subcounty: Bura East

Site 4: Ijara Technical and Vocational College

Coordinates: -1.633753° 40.155991°

Ijara TVC has a population of 71 people. The cleared area of college is 9.2 acres with a perimeter of 821m. It has two distinct buildings in good condition. It is near a dirt road. Community density is sparse. The average annual rainfall is 310mm while annual relative humidity is 72%, but in November and December, the peak can rise. Vegetation is more of scrub land with less about 30% ground cover.

County 4: Wajir

Subcounty: Wajir East

Site 1: Wajir Primary School

Coordinates: 1.744603°, 40.055563°

Wajir Primary has a school population of 1058 learners. The school area is 7.37 acres with 696m of perimeter. It has 5 buildings, which are of normal conditions. The school is fenced and is next to the tarmac road. It is in the middle of Wajir Town and therefore surrounded by many other buildings. Relative humidity ranges from an average of 44% - 62%.

Subcounty: Wajir North

Site 2: Ajawa Primary School

Coordinates: 2.960617°, 39.688287°

Ajawa Primary has a population of 573 learners. The school area is 7.1 acres with 761m of perimeter. There are five distinct buildings in the school compound and no indication of water supply infrastructure. The school is part of a small village of approximately 70 households. Surrounding vegetation cover is about 15%. There is also a dirt road besides the school. Relative humidity ranges from an average 44% - 62%.

Subcounty: Habaswein

Site 3: Wajir South Technical & Vocational College
Coordinates: TBD (To Be Determined)
Wajir South Technical & Vocational College has a population of 77 people.

County 5: Samburu
Subcounty: Samburu North
Site 1: Marti Primary School
Coordinates: 1.472612°, 36.719702°
Marti Primary School in Samburu County has a population of 259 and shares a compound with Marti Dispensary. The shared compound has an area of 23.7 acres with a temporary fence of 1250m. It is close to Marti Trading Centre which is half a kilometer to the North East. There is no indication of water infrastructure and boreholes could be the best solution. RH average 44% - 62%. Vegetation cover is below 2%.

Subcounty: Samburu Central
Site 2: Maralal Vocational Training Center
Coordinates: 1.090620°, 36.697513°
Maralal VTC has a population of 444 people. The institution has an area of 4.69 acres and a perimeter of 589m. It is in Maralal town. The VTC has 6 buildings which seem to be in good condition. The average annual percentage of humidity is: 60.0%. Soils are clayey thus with high water holding capacity.

3.3.2 6 Pokets of Poverty Counties:

This includes 2 sites per county: all of them are Primary Schools, with the excpeiton of Kilifi, primary due to the highest poverty levels and high levels of OOSC, Kilifi has 5 sites 4 primary schoosl and 1 TVET. A total of 15 learning institutions will be engaged in this programme.

County 1: Kilifi
Subcounty: Kaloleni
Site 1: Mariakani Vocational Training Centre

Coordinates: -3.860785°, 39.482785°
Mariakani VTC is within Kaloleni township. It has an area of 16.9 acres with a perimeter of 1.1km. It has 6 buildings and potential for Green Energy.

Subcounty: Sokoke, Vitengeni, Ganzu
Site 2: Dida Primary School
Coordinates: 3°25'35.04"S, 39°48'15.34"E
The area of the school is not definite as there is no indication of any boundary. The school, whose population is 463, is adjacent to the sukoke forest conservancy. It has 9 classrooms, 5 boys toilets, 5 girls toilets and 2 teachers toilets in poor condition. Near a semi-dense population cluster surrounding the school residentaional and commercial.
Currently no infrastructure for water, food & energy systems. The average annual relative humidity is 74%. With average rainfall of about 310mm.

Subcounty: Magarini
Site 3: Soso Chamari -2.905911°, 39.898266°

Cleared area of school is 5.81 acres with a perimeter of 647m. The school is surrounded by deep forest although its compound is completely bare. There are three major school buildings with 5 minor ones. Currently no infrastructure for water, food & energy systems. The average annual relative humidity is 61.8% and average monthly relative humidity ranges from 56% in February to 68% in June.

Subcounty: Magarini
Site 4: Kasikini Primary School-2.951569°, 39.775030°
From google earth, location is not definite. It seems to be in a forest with buildings not visible. High vegetation trees, grass. Not very near any densely populated areas, a few Kms from Kasikini Center. The average annual percentage of humidity is: 60.0%. Soils are clayey thus with high water holding capacity. This institution, with a population of 301 people, is 200 km from the Indian ocean and therefore receives reasonable rainfall.

County 2: Bungoma
Subcounty: Kimilili
Site 1: Nakalira Primary School
Coordinates: 0.605067°, 34.428789°
Nakalira Primary School in Bungoma has a population of 1054 pupils and an area of 1.97 acres with a hedge perimeter of 373m. It is a peri-urban institution of Bungoma town. Owing to good rainfall in Bungoma (>1500mm/year), roof water harvesting into Sausage tank has a good potential.

Subcounty: Cheptais
Site 2: Chepkube Primary School
Coordinates: 0.829725°, 34.427548°
Chepkube Primary School has a population of 384 learners and an area 8.52 acres with perimeter of 862m. It is a peri-urban institution of Bungoma town. Owing to good rainfall in Bungoma (>1500mm/year), roof water harvesting into Sausage tank has a good potential. There is also ample land where food crops and bio-energy trees can be grown.

County 3: Homa Bay
Subcounty: Mbita
Site 1: Lambwe Primary School
Coordinates: 0°34’29.89”S, 34.°22’11.06”E
Lambwe Primary with a population of 553 pupils is in Homa Bay. It has an 10.13 acres in size with a perimeter of 809m. The school is in a peri urban location of Homa Bay town. Although there is plenty of rainfall in Homa Bay, it may be worthwhile harvesting roof water and storing it in Sausage tanks for Water, Sanitation and Hygiene uses. The school also has plenty of land to grow its own food as well as bio-energy trees. There is a tarmac passing by the institution.

County 4: Siaya
Subcounty: Alego East
Site 1: Uuna Primary School

Uuna Primary School in Siaya has an area of 1.87 acres with a vegetative hedge fence of 348m. With 3 distinct buildings and annual rainfall of over 1000mm, the roof water harvesting potential is very good. The ground has a tree and grass vegetative cover of about 30%.

Subcounty: Alego Usonga
Site 2: Kochieng Primary School
0.0925°N, 34.2253°S

They are in an area occupied by mixed farmers. The landscape is a mosaic savanna of 50% grassland and >75% tree cover.

The total land size for the school is 1.82 acres. The school has a gate, not fenced. Otherwise, the general condition of the school buildings is below average.

The school has a total of 17 classrooms with an average of 49 learners per class. They do not have dining and boarding facilities.

3.3.3 Urban Infromal Settlements Counties:

This includes 2 Primary Schools in Machakos, 3 Priamry schools and 1 Secondary School in Nairobi. A total of 6 learning institutions will be engaged in this programme.

Subcounty: Westlands
Site 1: Kangemi Primary School
Coordinates: -1.270712°, 36.748391°
Kangemi Primary with a population of 2318 is in Nairobi. It has an area of 4.84 acres (This has to be ascertained in School) with a fenced perimeter of 630m. These are urban schools located in informal settlements. Although they are in municipalities, they also face water scarcity challenges. They have no infrastructure for water, food & energy systems in all the sites. The average monthly relative humidity ranges from 50% to Nairobi is 70%.

Subcounty: Makadara
Site 2: Mukuru Primary School

Coordinates: -1.312650°, 36.849146°
This school has a population of 1530 learners. Its compound is 0.94 acres in size with a perimeter of 286m. These are urban schools located in informal settlements. Although they are in municipalities, they also face water scarcity challenges. They have no infrastructure for water, food & energy systems in all the sites. The average monthly relative humidity ranges from 50% to Nairobi is 70%,

Subcounty: Lang'ata
Site 3: Kibera Primary School
Coordinates: -1.310018°, 36.784348°
Kibera Primary school is a school located in Kibera informal settlements. It has an area of 5.32 acres with a perimeter of 686m. The school has immense roof water harvesting potential and adequate field for producing both crops and energy trees e.g. Gliricida sepium.

Subcounty: Dagoretti North
Site 4: Kenya High School
Coordinates: -1.275823°, 36.780718°

Kenya High School Nairobi has an approximate area of 43.8 acres with a perimeter of 1578m. It has very good physical facilities (Buildings) including a swimming pool. With close to 15 acres of field, the school has a capacity to establish bio-energy infrastructure / interventions which it can share with surrounding Nairobi schools through Briquette production using Gliricidia sepium.

County 7: Machakos
Subcounty:
Site 1: Tumu Tumu Primary School
Coordinates: -0.802838°, 37.299576°
Tumu Tumu Primary School Machakos has an area of 6.59 acres with a non fenced perimeter of 637m. The school has two distinct buildings with good roof water harvesting potential as well as establishing Gliricidia plantation for briquettes bio-energy production for their own use.

Subcounty:
Site 2: Kaliluni Primary School
Coordinates: -1.491906°, 37.308605°
Kaliluni Primary School - Machakos has an area of 2.5 acres with a non-fenced perimeter of 483m. The school has four distinct buildings with good roof water harvesting potential and storage in Sausage tank for WASH uses. 50% of the school is vegetated with trees.

CHAPTER FOUR

4.0 RELEVANT LEGISLATIVE AND REGULATORY FRAMEWORK

There is a growing concern in Kenya and at global level that many forms of development activities contribute to degradation to the environment and human well being. Development activities have the potential to damage the natural resources upon which the economy is based. Environmental Impact Assessment is a useful tool for protection of the environment from the negative effects of developmental activities. It is now accepted that development projects must be economically viable, socially acceptable and environmentally sound. According to Sections 58 and 138 of the Environmental Management and Coordination Act (EMCA) No. 8 of 1999 and its amendment 2015 and Section 3 of the EMCA (Impact Assessment and Audit) Regulations 2003 (Legal No. 101), requires an Environmental Impact Assessment project report prepared and submitted to the National Environment Management Authority (NEMA) for review and eventual Licensing before the development commences.

The IMPReSED Programme is also anchored in various Policy and legal instruments, both domestic and international, that govern the key components of access, quality, sustainable livelihoods and skills development & employability.

4.1 RELEVANT POLICIES

There are a number of policies that are pertinent to this project, chief of which is the constitution of Kenya. Brief descriptions of the policies are given below.

4.1.1 Kenya Vision 2030

Kenya Vision 2030 is the country's development blueprint covering the period 2008 to 2030. It aims at making Kenya a newly industrializing 'middle income country providing high quality life for all its citizens by the year 2030. The vision has been developed through an all-inclusive stakeholder consultative process, involving Kenyans from all parts of the country. The vision is based on three 'pillars' namely; the Economic Pillar, the Social Pillar and the Political Pillar. The vision 2030 comes after the successful implementation of the Economic Recovery Strategy (ERS) for Wealth and Employment Creation 2003-2007.

The Kenya Vision 2030 economic pillar aims at providing prosperity of all Kenyans through an economic development programme aimed at achieving an average GDP growth rate of 10% per annum over the next 25 years from the year 2008. The social pillar seeks to build 'a just and cohesive society with social equity in a clean and secure environment'. On the other hand, the political pillar aims at realizing a democratic political system founded on issue–based politics that respects the rule of law, and protects the rights and freedoms of every individual in the Kenyan society.

The proposed project is in line with the economic and social pillars of Kenya vision 2030 and therefore its implementation will contribute to Kenya's realization of the objectives set in the Kenya Vision 2030.

4.1.2 Policy Paper on Environmental and Development (Sessional Paper No. 6 of 1999)

This policy was formulated on the basis of the National Environment Action Plan (NEAP) process of 1994. The policy's major objective is to harmonize environmental and

developmental concerns to ensure sustainability. Furthermore, this policy ensures that environmental issues are taken into consideration before the commencement of development policies, programmes, plans and projects.

The proposed Sub- project is therefore consistent with the Sessional Paper No. 6 of 1999.

4.1.3 Physical Planning Policy

The current policy governs the development and approval all building plans as provided for in the Physical and Land Use Planning Act, 2019

The proposed project will be subjected to the provisions of this policy and legislation. The plans for the proposed development have been submitted to the County Government

4.1.4 Public Health Policy

The prevailing public health policy calls upon the project proponent to ensure that buildings are adequately provided with utilities so that they are fit for human habitation.

The proposed development has been designed by professional engineers and architects and as such will have all amenities/utilities that are essential for safeguarding public health for all people using the facilities during the construction, operational and decommissioning phases of the project.

The proponent will adhere to the provisions of the relevant public health policy

4.1.5 Forest Policy, 2007

The policy underscores the need to sustainably manage forest resources within Kenya. The policy acknowledges that forest conservation and management has faced a number of challenges in Kenya; the increasing demand for land and forest resources, inadequate funding that constrains the provision of public services among others. This Policy proposes a broad range of measures and actions responding to the challenges faced by the forest sector**.**

The proponent will adhere to the tenets of this policy at all phases of the project especially when procuring timber and wood products, it must be ensured that they are from registered lumber yards and sustainable sources.

4.1.6 Education policies

Sessional Paper No. 1 of 2019

Sessional Paper No. 1 of 2019 on Reforming Education and Training for Sustainable Development in Kenya: The Paper Acknowledges that access and equity in education are constrained by marked regional disparities in access among other factors. The Sessional Paper also stipulates policies and strategies targeting the marginalized, disadvantaged, hard-to-reach and vulnerable groups.

The IMPReSED Programme aims to achieve the spirit of the Sessional Paper in each of its four components.

National Curriculum Policy (2019)
Operationalizes the Competency- Based Curriculum (CBC) and commits the MoE to promote inclusive education and ensure equity in education and training to address the needs of learners

from the ASALs, nomadic communities and those living in extreme poverty and informal settlements.
The Programme/programme achieves the objectives of the policy by addressing the disparities related to education in specific regions.

Education for Sustainable Development (ESD) Policy for the Education Sector (2017)
The policy integrates ESD principles into primary and secondary schooling; to develop competencies necessary for sustainable development through greening of schools to improve learning environments, environmental protection and climate change initiatives to enhance food security and improved livelihoods, which the IMPReSED Programme aims to realize.

Sector Policy for Learners and Trainees with Disabilities, (2018)
Stresses the importance of early identification, assessment and placement as a key component in the provision of quality and relevant education and training for learners and trainees with disabilities as read with Persons with Disability Act No,14 of 2003 which aims to achieve equal opportunities for persons with disabilities.
This is captured in the IMPReSED Programme that aims to empower about 100,000 targeted OOSC learners living with disabilities.

Education Sector Disaster Management Policy (2017)
Provides for an all-inclusive institutional framework for management of Disaster Risk Reduction (DRR) and Education in Emergencies (EiE) in Kenya.

The regions targeted by the IMPReSED Programme/programme are prone to various disasters such as drought and the activities under the Programme aim to mitigate these risks.

Education and Training Sector Gender Policy (2015)
Proposes responsive strategies to promote gender equality and inclusivity in education access, equity and equality. These include improving learning facilities and increasing the number of boarding schools for girls and boys in the ASALs, urban informal settlements and other low-potential areas.
The IMPReSED Programme aims at reducing gender barriers through initiatives like provision of the dignity packs among others which in turn improves access, retention and quality of education for girls to enable them competitively acquire education.

National Education Sector Strategic Plan (NESSP, 2018-2022)
Provides for programmes to reduce disparities in access and retention in Nomadic communities, marginalized areas, urban informal settlements and pockets of poverty in order to promote equity and inclusivity in education. It also provides a framework for integrating Madrassa and Dugsi (local/community Quran schools) into formal education in targeted counties.
The Programme aims at realizing the Plan by the actualization of each of its components and activities.

National School Meals and Nutrition Strategy (2017–2022):
Advocates for a nationally owned, sustainable and cost-effective school feeding programme that address the key outcomes such as enrolment, retention and transition; food and nutrition insecurity; and health and hygiene practices.
The strategy is operationalized by the Programme's/program's key mandate and activities such as the homegrown solutions for schools, farmer schools among others.

The Big Four Agenda.
The presidency gave four pillars that guided it through the 5-year development plan. The pillars of manufacturing, affordable housing, universal health coverage and food security are part of the Vision 2030 that Kenya and the world need to achieve.
The IMPReSED Programme contributes to the achievement of the Big Four Agenda by, for example, taking an integrated approach that not only improves access and quality to education by the children but also improves their health and well-being.

4.1.7 Water policy

National Policy on Water Resources Management and Development, 1999
The National Policy on Water Resources Management and Development promotes the systematic development of water facilities in all sectors while recognising wastewater as a by-product of this process. The Policy therefore calls for development of appropriate sanitation systems to protect people's health and water resources from institutional pollution. This implies that industrial and business development activities should be accompanied by corresponding waste management systems to handle the wastewater and other waste emanating there from.
Some of the The IMPReSED Programme activities such as micro-irrigation might be carried near water bodies. Therefore, in line with this policy, the integrity of these water systems will need to be protected throughout the implementation of the proposed Programme. This includes ensuring proper waste water management to prevent water pollution during both the construction and operational phases.

4.1.8 Energy policy

Government of Kenya Energy Policy and Plan of Action
This policy identifies energy supply as one of the infrastructural enablers of the economic, social and political pillars of Kenya's **Vision 2030** development plan. The policy is designed to provide adequate, quality, reliable and affordable energy in order to stimulate high and sustained economic growth needed to lead to higher incomes, increased employment and reduced poverty as per the projection of the national development plan.
The country's energy policy in the medium term aims at meeting the energy demands of the country in a more efficient and cost-effective way.
The policy is also intended to facilitate development, tapping and access of modern energy sources to all sectors of the country's economy.

4.1.9 Biodiversity policy

Kenya National Biodiversity Strategy and Action Plan (NBSAP) 2019-2030
The NBSAP 2019-2030 is presented as a road map to achieving biodiversity conservation targets in the country while also fulfilling international and regional obligations. The action plan sets the time required to realize the action, performance and verifiable indicators and allocates responsibilities for implementation to different institutions that include Government Ministries, Departments and Agencies (MDAs), County Governments, Private sector, Research and Academic Institutions, NGOs and CBOs. Its vision is to ensure that by 2030, Kenya will have a highly valued, conserved and sustainably utilized biodiversity contributing to socio-economic wellbeing of the people of Kenya.
The following are some of the guiding principals in line with this project.

1. Principle of preventive action: Conservation of biodiversity is better achieved by preventing environmental harm than by endeavoring to remedy or compensate for such harm.

2. Precautionary principle: Where there is a threat of significant reduction or loss of biodiversity, lack of complete scientific certainty should not be used as a reason for postponing cost-effective measures to avoid or minimize such a threat.
3. Polluter Pays principle: Those who cause damage to biodiversity should bear the costs of preventing it, removing it or reducing it.
4. Public participation and public access to information and justice in environmental matters: The public should have access to environmental information and the right to participate in the environmental decisionmaking process and to have that participation taken into account in the decision-making process.

This policy is triggered by any project with the potential to cause significant conversion (loss) or degradation of natural habitats, whether directly (through construction) or indirectly (through human activities induced by the Project). NACONEK is expected to abide by the above provisions by implementing ESMP.

4.2 LEGAL FRAMEWORK OF KENYA

Kenya has several statutes that govern environmental standards and quality. Most of these statutes are sector specific covering issues such as public health, planning, air quality, agriculture, water quality, and land use. This section seeks to bring to light statutes and legislation pertinent to the development of the proposed development herein referred to as the proposed project.

4.2.1 Constitution of Kenya, 2010

The Constitution of Kenya, promulgated into law on 27th September 2010 is the supreme law of the Republic of Kenya and binds all persons and all State organs at all levels of government. It provides the broad framework regulating all existence and development aspects of interest to the people of Kenya, and along which all national and sectoral legislative documents are drawn. In relation to environment, Article 42 of Chapter 4, the Bill of Rights, confers to every person the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative measures, particularly those contemplated in Article 69, and to have obligations relating to the environment fulfilled under Article 70.

Chapter 5 of the new constitution provides the main pillars on which the 77 environmental statutes are hinged and covers "Land and Environment" and includes the aforementioned articles 69 and 70. Part 1 of the Chapter dwells on land, outlining the principles informing land policy, land classification as well as land use and property.

Part 2 of the Chapter directs focus on the environment and natural resources. It provides for a clear outline of the state's obligation with respect to the environment. The Chapter seeks to eliminate processes & activities likely to endanger the environment. Article 69 states that:

1) The State shall:

- Ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits;
- Work to achieve and maintain a tree cover of at least ten percent of the land area of Kenya; Protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities;
- Encourage public participation in the management, protection and conservation of

the environment;

- Protect genetic resources and biological diversity; Establish systems on environmental impact assessment, environmental audit and monitoring of the environment; eliminate processes and activities that are likely to endanger the environment; and,
- Utilize the environment and natural resources for the benefit of the people of Kenya.

(II) "Every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.
The Constitution provides under Article 10, for human dignity, social justice, inclusiveness, equality, non-discrimination, protection of the marginalized, sustainable development, among others as the national values and principles of governance in Kenya.

The Constitution recognizes education as a social-economic right, a public good and a fundamental imperative for the country's development. Articles 43 guarantees the right to education for everyone, while Article 53 (b) points out that '…every child has the right to free and compulsory basic education.' Article 55 further commits the Government to implement measures to ensure access to relevant education and training opportunities by the youth. Article 56 (b) also stipulates that '…the State shall put in place affirmative action programmes designed to ensure that minorities and marginalized groups are provided with special opportunities in educational and economic fields.

The Constitution's Articles mentioned above are anchored in the IMPReSED Programme's key objective that seeks to address key barriers to access and participation in education for marginalized learners.
There are further provisions on enforcement of environmental rights as well as establishment of legislation relating to the environment in accordance to the guidelines provided in this Chapter. In conformity with the Constitution of Kenya 2010, every activity or project undertaken within the Republic of Kenya must be in tandem with the state's vision for the national environment as well as adherence to the right of every individual to a clean and healthy environment.

The proposed development project is a development activity that will utilize sensitive components of the physical and natural resources hence need for a clearly spelt out environmental and social management plan to curb probable adverse effects to the environment. The proponent will therefore adhere to the provisions of the Environmental and Social Management Plan provided in this report to ensure the publics and employee's right to a clean and safe environment is not infringed.
The IMPReSED Programme/programme *should observe the above stated conditions in as far as environmental protection is concerned*

4.2.2 Education Act

4.2.2.1 The Basic Education Act, (2013)

Provides for values and principles that guide provision of basic education in Kenya, such as peace promotion, integration, cohesion, tolerance and inclusion. Section 9 (c), pledges to ensure that children in marginalized, vulnerable or disadvantaged groups are not discriminated

against and prevented from pursuing and completing basic education. Section 94(1) establishes NACONEK and provides for its mandate in the Sixth Schedule.
IMPReSED Programme/programme aims at actualizing among others, the mandates of mobilize funds from various sources for the development of nomadic education in order to support relevant activities of the Council and establish appropriate linkages and partnerships with other participating departments and agencies.

4.2.2.3 Technical and Vocational Education and Training (TVET) Act, No. 29 of 2013

The Act provides for;

- The establishment of a technical and vocational education and training system,
- The governance and management of institutions offering technical and vocational education and training,
- Coordinated assessment, examination and certification,
- Promotion of access and equity in training and to assure standards, quality and relevance in such institutions,

Technical and Vocational Education and Training the Curriculum Development, Assessment and Certification Council (TVETA CDACC) is corporate body established under the TVET Act, where the Council is mandated to undertake design and develop Curricula for the training institutions' examination, assessment and competence certification and advise the Government on matters related thereto.

NACONEK Sub Projects will ensure that the proposed project training activities will align to the requirements of this Act.

4.2.3 Environmental Management and Coordination Act (EMCA) Amendment 2015

The Environmental Management and Coordination Act (EMCA) Amendment 2015 provides for the legal framework for the management of the Kenyan environment. Under the EMCA, all proposed projects that are likely to have significant impact on the environment according to the Second Schedule will undergo an Environmental & Social Impact Assessment (ESIA) while projects already in place will undertake annual Environmental Audits (EA). It aims at coordinating environmental protection activities in the country. In its preamble, the Act states that every person in Kenya has a right to a clean and healthy environment. According to section 58 of the Act (EMCA) No. 8 of 1999, second schedule 9 (i), and the environmental (Impact Assessment and Audit) Regulations, 2003, all new enterprises and projects must undergo Environmental & Social Impact Assessment (ESIA). The ESIA study report is submitted to the National Environment Management Authority (NEMA) in the prescribed form.

It is in line with this provision that the proponent appointed ESIA experts to undertake an Environmental and Social Impact Assessment and prepare a report in respect of the proposed development. This addresses the requirement as the project activities are likely to have negative environmental impacts. This will ensure the Proponent observes continuous improvement on environmental, health and safety management and takes appropriate measures to mitigate any adverse impacts to the environment and the surrounding communities that the project may have during its implementation and operation. Part VII, Section 68 of the same Act requires operators of projects or undertakings to carry out environmental audits in order to determine level of compliance with statements made during the ESIA. The audit report should be submitted to NEMA.

The proponent shall submit an Environmental Audit report in the first year of operation to confirm the efficacy and adequacy of the Environmental Management Plan Section 87 sub-section 1 states that no person shall discharge or dispose of any wastes, ether generated within or outside Kenya, in such a manner as to cause pollution to: environment or ill health to any person, while Section 88 provides for acquiring of a license for generation, transporting or operating waste disposal facility. According to section 89, any person who, at the commencement of this Act, owns or operates a waste disposal site or plant or generate hazardous waste shall apply to the NEMA for a license.

Sections 90 through 100 outlines more regulations on management of hazardous substances including oils, chemicals and pesticides. The proponent will have to ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as solid waste management plans, water reticulation maintenance and landscaping are implemented, as per the design drawings and maintained throughout the project cycle EMCA 1999, Amended in 2015 has several subsidiary legislations that were enacted to ensure effective implementation of the Act. A few regulations that are pertinent to the proposed project are described below.

4.2.3.1 Environmental Management and Coordinating (Water Quality) Regulation 2006

The Regulations provides for sustainable management of water resources including prevention of water pollution and protection of water sources (lakes, rivers, streams,' springs, wells and other water sources). It is an offence under Regulation No.4 (2), for any person to throw or cause to flow into or near a water resource any liquid, solid or gaseous substance or deposit any such substance in or near it, as to cause pollution. Regulation No. 11 further makes it an offence for any person to discharge or apply any poison, toxic, noxious or obstructing matter, radioactive waste or other pollutants or permit the dumping or discharge of such matter into the aquatic environment unless such discharge, poison, toxic, noxious or obstructing matter, radioactive waste or pollutant complies with the standards for effluent discharge into the environment Regulation No. 14 (1) requires every licensed person generating and discharging effluent into the environment to carry out daily effluent discharge quality and quantity monitoring and to submit quarterly records of such monitoring to the Authority or its designated representatives.

The proponent will have to ensure that appropriate measures to prevent pollution of underground and surface water sources are implemented throughout the project cycle.

4.2.3.2 Environmental Management and Co-ordination (Waste Management) Regulations, 2006

The regulations provide details on management (handling, storage, transportation, treatment and disposal) of various waste streams including:

- Domestic waste
- Industrial waste,
  - Hazardous and toxic waste
  - Pesticides and toxic substances
  - Biomedical wastes and Radioactive waste

Regulation No.4 (1) makes it an offence for any person to dispose of any waste on a public highway, street, road, recreational area or in any public place except in a designated waste receptacle.

Regulation 5 (1) provides categories of cleaner production methods that should be adopted by waste generators in order to minimize the amount of waste generated and they include:

i) Improvement of production process through-
   - Conserving raw materials and energy

- Eliminating the use of toxic raw materials and waste
- Reducing toxic emissions and wastes

ii) Monitoring the product cycle from beginning to end by-

- Identifying and eliminating potential negative impacts of the product
- Enabling the recovery and re-use of the product where possible
- Reclamation and recycling

ii) Incorporating environmental concerns in the design and disposal of a product.

The Proponent shall ensure that the main contractor adopts and implements all possible cleaner production methods during the construction phase of the project.

Regulation 6 requires waste generators to segregate waste by separating hazardous waste from non- hazardous waste for appropriate disposal.

Regulation 14 (1) requires every trade or industrial undertaking to install at its premises antipollution equipment for the treatment of waste emanating from such trade or industrial undertaking.

Regulation 15 prohibits any industry from discharging or disposing of any untreated waste in any state into the environment.

Regulation 17 (1) makes it an offence for any person to engage in any activity likely to generate any hazardous waste without a valid Environmental Impact Assessment license issued by NEMA.

Regulation 18 requires all generators of hazardous waste to ensure that every container or package for storing such waste is fixed with a label containing the following information:

- The identity of the hazardous waste
- The name and address of the generator of waste
- The net contents
- The normal storage stability and methods of storage
- The name and percentage of weight of active ingredients and names and percentages of weights of other ingredients or half-life of radioactive material
- Warning or caution statements which may include any of the following as appropriate- -the words "WARNING" or "CAUTION" - the word "POISON" (marked indelibly in red on a contrasting background; and -the words "DANGER! KEEP AWAY / NO ENTRY FOR UNAUTHORIZED PERSONS" and -a pictogram of skull and crossbones

Regulation 19 (1) requires every person who generates toxic or hazardous waste to treat or cause to be treated such hazardous waste.

During the construction phase of the project, the Proponent shall ensure that the main contractor implements the above-mentioned measures as necessary to enhance sound environmental management of waste and institutions will be responsible for appropriate waste management during the operational phase.

4.2.3.3 Environmental Impact (Assessment and Auditing) Regulations, 2003

The Environmental Impact Assessment exercise under the Act is guided by the Environmental Impact Assessment (Assessment and Auditing) Regulations of the year 2003, which was given under legal notice no. 101. The regulations stipulate the ways in which environment impact assessment and audits should be conducted. The project falls under the second schedule of EMCA, 1999 section 58 (1), (4) that require an Environmental Impact Assessment report. As stipulated by the legal notice No. 101, 2003, PART V, Section 31 (3((a) (i) and (ii) it is required that an environmental assessment be undertaken to provide baseline

information upon which subsequent environmental control audit shall be based.

It is in under these regulations that the proponent commissioned Horn of Africa LIMITED; a firm of experts to carry out an ESIA exercise, write a report and submit it to NEMA for review, approval and licensing

4.2.3.4 Environmental Management and Coordination (Conservation of Biodiversity Regulations 2006)

The primary purpose of these regulations is to monitor the status and the components of biological diversity in Kenya and take necessary measures to prevent and control their depletion so as to ensure that conservation of biological diversity resources is achieved. Part II, section 4 of the regulation's states that (1) A person shall not engage in any activity that may- (a) have an adverse impact on any ecosystem; (b) lead to the introduction of any exotic species; (c) lead to unsustainable use of natural resources, without an Environmental Impact Assessment License issued by the Authority under the Act.

The contractor will ensure that the construction activities do not negatively impact on the existing ecosystems near the construction area.

4.2.3.5 Environmental Management and Co-ordination (Noise and Excessive Vibrations Regulations 2009)

The regulations define noise as any undesirable sound that is intrinsically objectionable or that may cause adverse effects on human health or the environment. The regulations prohibit any person from making or causing to be made any loud, unreasonable, unnecessary or unusual noise which annoys, disturbs, injures or endangers the comfort, repose, health or safety of others and the environment.

Article 13 2(d) of the regulations allows for construction work at night for public utility construction, construction of public works, projects exclusively relating to roads, bridges, airports, public schools and sidewalks, provided noise generated is not caused within a residential building or across a residential real property boundary where such noise interferes with the comfort, repose, or safety of the members of the public. The second Schedule of the Regulations provides for the maximum permissible level of noise at construction sites.

MAXIMUM PERMISSIBLE NOISE LEVELS FOR CONSTRUCTION SITES
(Measurement taken within the facility)

Facility		Maximum Noise Level Permitted (Leq) in dB(A)	
		Day	Night
(i)	Health facilities, educational institutions, homes for disabled etc.	60	35
(ii)	Residential	60	35
(iii)	Areas other than those prescribed in (i) and (ii)	75	65

Time Frame:

Day: 6.01 a.m. – 6.00 p.m. (Leq. 14 h)
Night: 6.01 p.m. – 6.00 a.m. (Leq. 14 h)

Table 6: *Maximum Permissible Noise levels for Construction Sites*

The Contractor will be required to take into consideration the monitoring of the noise and

vibrations levels within the institution to ensure compliance and limit noise disturbance to the community

4.2.3.6 Environmental Management and Co-ordination (Air Quality Regulations, 2014)

This regulation is referred to as "The Environmental Management and Coordination (Air Quality) Regulations, 2014". The objective is to provide for prevention, control and abatement of air pollution to ensure clean and healthy ambient air. It provides for the establishment of emission standards for various sources, including as mobile sources (e.g. motor vehicles) and stationary sources (e.g. industries) as outlined in the Environmental Management and Coordination Act, 1999. It also covers any other air pollution source as may be determined by the Minister in consultation with the Authority. Emission limits for various areas and facilities have been set. The regulations provide the procedure for designating controlled areas, and the objectives of air quality management plans for these areas. The following operations (provided they are not used for disposal of refuse), are exempt from these regulations:

- Back-burning to control or suppress wildfires;
- Fire-fighting rehearsals or drills conducted by the Fire Service Agencies
- Traditional and cultural burning of savannah grasslands;
- Burning for purposes of public health protection;

The Proponent and the contractor shall observe policy and regulatory requirements and implement the mitigation measures proposed in this regulation in an effort to comply with the provisions on abatement of air pollution.

4.2.4 Occupational Safety and Health Act, 2007

This is an act of Parliament to provide for the safety, health and welfare of workers. During project implementation and operations, a large labour force will be required. This Act makes provisions for safety, health and welfare of persons upon which provision of their protection will be based. This will protect them against hazards to health and safety arising out of or in connection with their activities at work especially during the construction phase. This Act therefore safeguards workers welfare during the project phases by ensuring capacity building on Health and safety of workers at work place.

In summary, this act will be used a guideline to ensure health and safety of workers is guaranteed. The proponent will ensure that the contractor includes in the contract adequate measures to promote safety and health of workers during all phases of the proposed project. There is a number of subsidiary legislations that was enacted to operationalize the OSHA 2007. The following are subsidiary legislation under OSHA 2007 which is pertinent to the proposed project. The Contractor should ensure that the construction area is registered as a workplace by Directorate of Occupational Safety and Health Services (DOSHS), provide appropriate PPE to workers, train the project workers on health and safety, keeping records on incident logs and reporting to DOSHS and the African development Bank.

4.2.6 Public Health Act (Cap. 242)

Section 115 of the Act states that no person/institution shall cause nuisance or, conditions likely to be injurious or dangerous to human health. Section 116 require local Authorities (currently County governments) to take lawful, necessary and reasonably practicable

measures to maintain areas under their jurisdiction clean and sanitary to prevent occurrence of nuisance or condition liable for injurious or dangerous to human health. Such nuisance or conditions are defined under Section 118 waste pipes, sewers, drains refuse pits in such a state, situated or constructed as in the opinion of the medical leer of health to be offensive or injurious to health.

Any noxious matter or waste water, discharged from any premises into a public street or into the gutter or side channel or watercourse, irrigation channel or bed not approved for discharge is also termed as a nuisance.

Other nuisances are accumulation of materials or refuse which in opinion of the medical officer of health is likely to harbor rats or other vermin.

The proponent will be required to abide by these provisions throughout the project cycle.

Part XII Section 136 states that all collections of water, sewage, rubbish, refuse and fluids which permits or facilitate the breeding or multiplication of pests shall be termed nuisances and are liable to be dealt with in the manner provided by this Act.

The Contractor will be required to contract a licensed solid waste collector to collect all solid waste from the site to an approved dumping site.

4.2.6 Physical and Land Use Planning Act No 13 of 2019

The County Governments are empowered under the Act to reserve and maintain all land planned for open spaces, parks, urban forests and green belts. The same Section, therefore, allows for prohibition or controls the use and development of land and buildings in the interest of proper and orderly development of an area.

That any person who carries out development without permission will be required to restore the land to its original condition. It also states that NO other licensing authority shall grant license for commercial or industrial use or occupation of any building without a development permission granted by the respective local authority.

Finally, that if in connection with a development application, County authority is of the opinion that the proposed development activity will have injurious impact on the environment; the applicant shall be required to submit together with the application an environmental & social impact assessment (ESIA) report. EMCA, 1999 echoes the same by requiring that such an ESIA is approved by the National Environmental Management Authority (NEMA) and should be followed by annual environmental audits.

The proponent has complied with this provision by appointing ESIA Lead experts to prepare and submit this Environmental & Social Impact Assessment Project report to National Environmental Management Authority (NEMA). Formal approval of architectural and engineering drawings by the Respective County Government in the Physical Planning Department will be required prior to commencement of the project.

4.2.7 County Government Act 2012

The main purpose of the enactment of this Act was to give effect to Chapter Eleven of the Constitution; to provide for county governments' powers, functions and responsibilities to

deliver services and for connected purposes. Functions which were carried out by local governments were effectively transferred to the county governments. The Act gives county the responsibility of planning and co-coordinating all developments within their areas of jurisdiction.

Part XI (sections 102-115) of the Act provides for planning principles and responsibilities of the county governments. The land use and building plans provided for in the Act are binding on all public entities and private citizens operating within the particular county.

The plans for the proposed project have been approved by the Respective County Government. The County government may also issue directives and authorizations on various aspects e.g. waste management and fire emergency preparedness among others as they may deem fit.

4.2.8 Penal Code Act (Cap.63)

Section 191 of the penal code states that if any person or institution that voluntarily corrupts or foils water for public springs or reservoirs, rendering it less fit for its ordinary use is guilty of an offence. Section 192 of the same Act says a person who makes or vitiates the atmosphere in any place to make it noxious to health of persons /institution, dwelling or business premises in the neighbourhood or those passing along public way, commit an offence.

The Proponent will be required to ensure strict adherence to the Environmental and Social Management Plan throughout the project cycle in order to mitigate against any possible negative impacts.

4.2.9 Land Act, 2012

This is an Act of Parliament to give effect to Article 68 of the Constitution, to revise, consolidate and rationalize land laws; to provide for the sustainable administration and management of land and land-based resources, and for connected purposes. Part viii of this Act provides procedures for compulsory acquisition of interests in land.

Section 111 (1) states that if land is acquired compulsorily under this Act, just compensation shall be paid promptly in full to all persons whose interests in the land have been determined. The Act also provides for settlement programmes. Any dispute arising out of any matter provided for under this Act may be referred to the Land and Environment Court for determination.

The proponent has land for the proposed project in accordance with this Act and appropriate documentation on the same as provided in annex 3.

4.2.10 Explosives Act (Cap 115)

The Act regulates the purchase, assemblage, manufacture and use of explosive materials. Explosives are used routinely in many quarries for blasting and lessening of rocks. The Act also stipulates conditions for use, precautionary measures and storage requirements. The Act requires one to seek authority to acquire, transport and use blasting materials. The Act makes it an offence liable for penalties to any person causing an explosion where life or property is endangered.

If the proponent establishes a quarry or quarries for the purpose of getting building materials, he will have to comply with the provisions of this Act and work in liaison with the Mines and Geology Department.

4.2.11 Water Act, 2016

The Act deals with control and conservation of water resources. It prohibits activities that may cause pollution to sources of water likely to be used for human consumption or domestic use or in the manufacture of food for human consumption.

The contractor and proponent will ensure adequate measures are adopted to control erosions and run-off that may affect the quality of the spring water.

4.2.12 Energy Act, 2019

Electrical installation work 148. (1) A person who wishes to carry out electrical installation work must be licensed as an electrical contractor by the Authority. Authorization to carry out electrical installation work (2) To be licensed as an electrical contractor, a person must— (a) be a certified electrical worker; or (b) have in his employment a certified electrical worker.

151. (1) It shall be the duty of any person planning, building, operating or maintaining a transmission or distribution system to ensure that such works are carried out only by electrical contractors and electrical workers duly authorized by the Authority. Carrying (2) It shall be the duty of the owner or occupier of any premises to ensure, in accordance with regulations issued under this Act, that the electrical installation in the subject premises is—

(a) carried out only by a duly authorized electrical contractor and appropriate certificates detailing particulars of the installation submitted to the licensee, before initial connection to a supply of electricity; and

(b) tested and inspected periodically, any defects being remedied, and appropriate certificates detailing particulars of the installation issued and displayed at the point of supply.

The proponent shall ensure only licensed electrical contractors are allowed to undertake electrical installations in the proposed building

4.2.13 National Construction Authority Regulations Act, 2014

PART IV-Identification and Reporting of Construction Works Contracts or Projects by Owner

17. (L) All Construction Works, Contracts or Projects Either in The Public or Private Sector Shall Be Registered with The Authority in Accordance with The Act.

The proponent shall involve a contractor already registered by the Authority qualified to undertake the proposed construction works.

4.2.14 HIV and AIDS Prevention and Control Act, 2006

Part VIII of the Acts directs that no Discriminatory Acts and Policies should be allowed in the workplace.

In particular 31. (1) Subject to subsection (2), no person shall be-

(a) denied access to any employment for which he is qualified; or

(b) transferred, denied promotion or have his employment terminated, on the ground only of his actual, perceived or suspected HIV status.

Therefore, the Contractor must have a policy that promotes inclusivity despite any person's status regarding HIV and AIDS as well create awareness to the employees and local community on issues related to HIV and AIDs.

4.2.15 The Children Act (Cap 141)

provides that the best interest of the child is the primary consideration when dealing with matters affecting the child. Section 3 provides that the Government shall take steps to the maximum of its available resources with a view to achieving progressively the full realization of the rights of the child, including the right to education which is provided for under section 7. Section (7): Commits the Government to adopt the necessary measures to ensure the full realization of the right to free and compulsory basic education.

The IMPReSED Programme/programme takes an integrated approach to ensure that the right of education to children in the targeted counties is achieved sustainably.

4.2.16 The Employment Act No 11, 2007

The Act is enacted to consolidate the law relating to trade unions and trade disputes, to provide for the registration, regulation, management and democratisation of trade unions and employers organisations and federations. Its purpose is to promote sound labour relations through freedom of association, the encouragement of effective collective bargaining and promotion of orderly and expeditious dispute the protection and promotion of settlement conducive to social justice and economic development for connected purposes. This Act is important since it provides for employer – employee relationship that is important for the activities that would promote management of the environment at a workplace.

NACONEK is bound by this law to abide to its stipulations on employee management and relations as indicated in programme ESMP

4.2.17 Climate change Act, 2016

This is an Act of Parliament enacted to provide for a regulatory framework for enhanced response to climate change, to provide for mechanism and measures to achieve low carbon development. Part IV Section 15 provides on how Climate change considerations should be integrated in every public-sector entity. A public entity is expected to observe the Act together with provisions of the National Climate Change Action Plan.

This Act is relevany as the programme deals wth poverty reduction exercebated by climate change. NACONEK shall comply with Act as indicated in ESMP

4.2.18 Work Injury Benefits Act, 2007 ("WIBA")

This is an Act of Parliament to provide for compensation to employees for work related deaths, injuries and diseases contracted in the course of their employment and for connected purposes. During the proposed project construction and operations phases, a large labour force will be engaged. This Act makes provisions for safety, health and welfare of persons upon which provisions of their protection will be based. This will protect them against hazards to health and safety arising out of or in connection with their activities at work especially during the construction and operation phases. The Contractor will be responsible during the construction phase while institution Management during operation and decommissioning phases.

In summary, this Act will be used as a guideline to ensure health and safety of workers as well as students is guaranteed. The proponent will ensure that the contractor includes in the contract adequate measures to promote safety and health of workers

during all phases of the proposed project through workers insurance covers and ensuring that the construction area is registered as a workplace by Directorate of Occupational Safety and Health Services (DOSHS), provide appropriate PPE to workers/students and staff, create awareness on the need for safety by having regular tool box meetings, displaying warning signages, regular trainings and drills e.g. first aid etc.

4.3 RELEVANT INTERNATIONAL CONVENTIONS AND TREATIES

Kenya is signatory to several international conventions and treaties that would need to be adhered to in implementing this project and are geared towards environmental protection and conservation. Some of these include;

- ILO Conventions ratified by Government of Kenya
- Safety and Health in Construction Recommendation, 1988
- United Nations Framework Convention on Climate Change
- Important Bird Areas
- United Nations Convention on Biological Diversity (UNCBD)

4.3.1 Convention on Biological Diversity (1992)

The convention promotes the protection of ecosystems and natural habitats, respects the traditional lifestyles of indigenous communities, and promotes the sustainable use of resources. The project activities especially during construction will impact negatively to the flora and fauna of the respective construction areas.

As such both the proponent and the contractor must ensure that the activities of the proposed project do not affect the immediate ecosystems negatively and that the livelihoods of the local people are not negatively affected but rather enhanced.

4.3.2 Stockholm Convention on Persistent Organic Pollutants (POPs)

PoPs have a long-time effect on the food chain and can persist in the environment for a very long time. Due to global warming, most of these pollutants end up in the Nordic countries and hence the convention was signed in Stockholm, Sweden.

All states are to abide by requirements in the treaty as it is designed to protect human health and the environment from PoPs- which are chemical substances that are persistent and toxic, that bio-accumulate in fatty tissue (achieving higher concentrations as they move up a particular food chain) and that are prone to long range environmental transport. This convention is most pertinent during the construction phase of the project.

The contractor and the proponent must ensure that the materials and processes employed do not lead to the emission of Persistent Organic Pollutants.

4.3.3 Vienna Convention for the Protection of Ozone Layer

Inter-governmental negotiations for an international agreement to phase out ozone depleting substances concluded in March 1985 with the adoption of this convention to encourage intergovernmental co-operation on research, systematic observation of the ozone layer, monitoring of CFC production and the exchange of information.

Therefore, both the proponent and the contractor are obliged to minimize or phase out the generation of CFCs into the atmosphere during the project cycle.

4.3.4 Convention on the Rights of the Child, Article 28 (1989):

State parties recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity.

4.3.5 The UN Sustainable Development Goals:
were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. IMPReSED contributes to achievement of all goals

4.3.6 African Union- Agenda 2063;
"A prosperous Africa based on inclusive growth and sustainable development" requires that Africa makes significant investments in education with the aim of developing human and social capital through an education and skills revolution emphasizing innovation, science and technology.

4.3.7 African Charter on the Rights and Welfare of the Child;
It calls for protection against abuse and bad treatment, negative social and cultural practices, and all forms of exploitation. Article 2(5)&(6) of the Constitution ratifies international treaties and conventions to form part of Kenyan law.

4.3.8 United Nations Framework for Convention on Climate Change (UNFCCC): The convention addresses the principles of common but differentiated responsibility and precautionary action. Its main objective is to achieve the stabilisation of greenhouse gas concentrations in the atmosphere at a level that prevents dangerous anthropogenic interference with climate systems and within a specific timeframe which will allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. Kenya signed the Kyoto protocol to the UNFCCC in 1997 which provided limitations and reduction commitments for developed countries and those in transition.
Kyoto Protocol to the United Nations Framework Convention on Climate Change aim is to reduce or limit the emission of gases contributing to the "greenhouse effect" and causing climate change in the industrialized countries.
United Nations Framework Convention on Climate Change (UNFCCC) aim is to achieve stabilization of greenhouse gas concentrations. The Paris climate change agreement goal is to limit global warming to well below 2, preferably to 1.5 degree Celsius, compared to pre-industrial levels.

4.4 Institutional Framework
The overall authority for implementation of the environmental and social mitigation measures and management plans will be *NACONEK*. The key responsible implementing organisation for the construction phase of the Programme will be the Contractor(s), due to their physical presence and direct involvement in the Programme.
A summary of other organisations that are relevant to the proposed Programme are provided in *Table* 6.2.
Some of the institutions relevant to the proposed project are presented on Table 7 below:

Table 6.2 *Institutional Framework*

Institutional Framework for Environmental and Social Systems under the IMPReSED			
No.	**Institution**	**Responsibilities**	**Relevance to the programme**
a)	Ministry of Environment and Forestry	• The Ministry of Environment and Forestry is responsible for the environment at the policy level. The mission statement and the key objective of the ministry is to facilitate good governance in the protection, restoration, conservation, development and management of the environment, water, and natural resources for equitable and sustainable development. • The mandate of the ministry is to monitor, protect, conserve, and manage the environment and natural resources through sustainable exploitation for socio-economic development aimed at eradication of poverty, improving living standards and ensuring that a clean environment is sustained now and in the future. The ministry comprises of various directorates, parastatals and departments including the national environment management authority.	Construction related activities shall be carried out in manner that ensures appropriate usage of the environment, water, and natural resources. Proposed infrastructure shall not be constructed in environmentally fragile areas. Before commencing construction related activities, mandatory environmental and social risk screening will be done, and requisite instruments developed to guide management of adverse impacts and to ensure environmental and social sustainability.
b)	National Environment Management Authority	• National Environment Management Authority is a government parastatal established under the Environmental Management and Coordination Act (EMCA) No.8 of 1999, amended in 2015. • The responsibility of NEMA is to supervise and coordinate all matters relating to the environment and be the principle of government agency in the implementation of policies relating to the environment. • The authority is responsible for granting ESIA approvals including monitoring compliance with all environment regulations for any development Programme, to ensure protection and sustainability of the environment and development.	Apart from this ESIA, it is recommended in *Chapter 10* that specific activities should have EIA to be submitted to County NEMA office for review and issuance of activity specific licences. The MoE will liaise with NEMA in monitoring compliance and implementation of ESMPs.
c)	County Environmental Committees	• The County environmental committees contribute to decentralization of environmental management and enable the participation of local communities including persons with disabilities, marginalised groups and women in environmental management at the	The committees have a responsibility to conduct site visits and review the environment related reports of the County Programmes and in some cases attend site meetings of the sub-

Institutional Framework for Environmental and Social Systems under the IMPReSED			
No.	**Institution**	**Responsibilities**	**Relevance to the programme**
		county level. • The environmental management committees are constituted by the Governor and are responsible for the proper management of the environment within the County for which it is appointed.	Programmes to follow-up on critical issues. These are in relation to construction related activities.
d)	National Environmental Complaints Committee	• The National Environmental Complaints Committee (NECC) is established under Section 31 of EMCA. The NECC is responsible for the investigation of any person or even against NEMA or on its own motion on any suspected case of environmental damage and/or degradation. • The NECC is required by law to submit reports of its findings and recommendations to NEMA.	Where grievance cannot be resolved through the programme GRM or sub-Programme GRM systems, the committee shall be engaged to help address such environmental related complaints/ grievances or those against NEMA.decisions
e)	National Environment Tribunal	National Environment Tribunal is responsible to hear disputes arising from decisions of NEMA on issuance, denial, or revocation of licences.	The tribunal shall be engaged as and when disputes arise against NEMA as related to programme construction activities.
f)	Environment and Land Court	The Court has jurisdiction over any disputes relating to the environment and land. The Court has powers to deal with disputes relating to: i) land administration and management; ii) public, private and community land and contracts, choses in action or other instruments granting any enforceable interests in land; iii) appellate jurisdiction over the decisions of subordinate courts or local tribunals in respect of matters falling within the jurisdiction of the Court; and, iv) it exercises supervisory jurisdiction over the subordinate courts, local tribunals, persons or authorities in accordance with Article 165(6) of the Constitution.	The Court shall be engaged as and when matters arise as related to implementation of programme activities such as construction operations particularly when such environmental related complaints/ grievances cannot be resolved through program's GRM at sub-Programme, county, and national levels.
g)	Directorate of Occupational Safety and Health Services (DOSHS)	• The Directorate of Occupational Safety and Health Services (DOSHS) is one of departments within the Ministry of Labour and Social Protection, whose primary objective is to ensure safety, health and welfare of all workers in all workplaces. • The Directorate enforces Occupational Safety and Health Act, (2007) with its	DOSHS will be responsible for registration of workplaces and carries out inspections to check for compliance with health and safety

Institutional Framework for Environmental and Social Systems under the IMPReSED			
No.	**Institution**	**Responsibilities**	**Relevance to the programme**
		subsidiary legislation which aims at prevention of accidents and diseases at work. It also administers the Work Injury Benefits Act, 2007 (WIBA, 2007) which provides for compensation of workers who have been injured or have suffered a disease out of and in the course of employment. • Inspecting workplaces to ensure compliance with safety and health laws, including: investigation of occupational accidents and diseases with a view to preventing recurrence, training on OSH, first aid and fire safety and disseminating information on occupational safety and health to customers among other issues	
h)	The National Construction Authority (NCA)	The NCA was constituted to regulate, streamline and build capacity in the construction industry. It oversees the Kenyan construction industry and coordinates developments in the sector to ensure an effective and sustainable industry. The authority oversees i) accrediting and registering contractors and regulating their professional undertakings, ii) registering all construction Programmes, iii) accrediting and certifying skilled construction workers and construction site supervisors, iv) commissioning research into matters relating to the building sector.	NCA will register sites and issue permits for construction sub-Programmes under IMPReSED. It will also have a supervision role as part of its mandate to manage construction sites including safety aspects of construction of Programme and to assure quality of infrastructure constructed in the schools.
i)	Ministry of Health (Department of Public Health)	Public health officers play a critical role in the regulation and enforcement of the public health requirements. In Schools, they are required to: a) assess food handlers' health status, b) conduct impromptu visits to schools to check on food storage, food preparation process and sources and quality of water c) give advice bon quality standards for food and food storage and processing, and d) approve design drawings for school infrastructure before construction.	Public health officers will facilitate in promoting food safety, handling, sourcing, and storage in the beneficiary schools. Additionally, the officers will review and approve designs of proposed school infrastructure and ensure such infrastructure adhere to public health requirements.
j)	Department of Public Works (Public Works Engineers)	Public Works Department support schools by providing technical advice on aspects such as siting, development of designs, bill of quantities and supervision of the construction works to ensure quality construction of infrastructure in schools.	MoE is expected to work in close collaboration with public works engineers on technical design and siting of proposed infrastructure to

Institutional Framework for Environmental and Social Systems under the IMPReSED			
No.	**Institution**	**Responsibilities**	**Relevance to the programme**
		They also review and approve design drawings. The department also issues the construction completion certificate necessary for prompting payment/handing over the facility to the schools/MoE.	assure quality of such infrastructure.
k)	County Governments	The County Governments have powers to control or prohibit all businesses, factories and other activities including the proposed programme which by reason of smoke, fumes, gases, dust, noise or other cause, maybe a source of danger, discomfort or annoyance to the neighborhood. They alos have powers to prescribe conditions that such businesses, factories, and other developers must comply with.	County Government and its relevant departments shall supervise programme roll out within respective counties to ensure no activity being implemented will be a source of danger, discomfort or annoyance to the learners and the community at large.
Institutional Responsibilities for Social Systems			
l)	Commission on Administrative Justice (CAJ)	The Commission on Administrative Justice - Office of the Ombudsman is mandated to tackle maladministration in the public sector. In this regard, the Commission is empowered to, among other things, investigate complaints of delay, abuse of power, unfair treatment, manifest injustice or discourtesy. The Commission is also mandated to oversee and enforce the implementation of the Access to Information Act, 2016.	The commission shall engage with targeted Counties' Directors of Education to facilitate the avoidance of abuse of power, delay, unfair treatment and injustice to programme beneficiaries.
m)	Department of Social Protection	This Department is responsible for sectoral oversight and management, of all matters concerning children, older persons and persons with disabilities. It also overseas the development of policies on children, older persons, persons with disabilities and social development, management of statutory institutions.	The department will ensure the protection of children from the risks of Gender based Violence/Sexual Exploitation and Sexual Harassment (GBV/SEA-SH) and child labor.
n)	Department of Labour	Responsible for sectoral oversight and management of all matters concerning employment, labour relations and working condition. It is responsible for implementing the National Labour and Employment Policy Management; and Industrial Relations Management The Department is also responsible for the promotion of occupational health and safety at work, carrying out workplace inspection, and implementing Workman's Compensation Policy.	The Department will ensure protection of workers from risks of GBV/SEA-H. It will also ensure that female workers involved in construction and female teachers have equal employment opportunities.

Institutional Framework for Environmental and Social Systems under the IMPReSED			
No.	**Institution**	**Responsibilities**	**Relevance to the programme**
0)	Ministry of Public Service and Gender State Department of Gender	Responsible for sectoral oversight and management of all matters concerning gender. This includes implementation of the Gender Policy, special programs for women affirmative action, social empowerment of women, gender mainstreaming in ministries/departments/agencies, community mobilization, domestication of international treaties/conventions on gender, and policy and programmes on gender violence.	The department will assist in promoting equitable access to programme benefits between women and men; monitoring of 30% access to government procurement opportunities for women, youth, and persons with disabilities; supporting activities targeting to reduce GBV and ensuring gender mainstreaming during the Programme implementation.
p)	National Gender and Equality Commission (NGEC)	Responsible for oversight and surveillance of all matters concerning gender equality and equity;promoting gender equality and equity; coordinating gender main-streaming in national development; and facilitating gender main-streaming in national development.	NGEC will assist to ensure that there is gender equality and equity in access to programme benefits including employment opportunities created through the construction activities and in teacher recruitment.
q)	Kenya National Commission of Human Rights	The main goal of KNCHR is to investigate and provide redress for human rights violations. It achieves this goal by researching and monitoring compliance with human rights norms and standards, carrying out education and awareness creation on human rights, facilitating training, campaigns and advocacy on human rights as well as collaboratig with other stakeholders in Kenya on human rights issues.	KNCHR will assist to investigate and provide redress for human rights violations, as well as in monitoring compliance with human rights norms and standards in basic education in the target Counties.

The National Environmental Council
The National Environmental Council is responsible for policy formulation and directions for the purposes of EMCA. The Council also sets national goals and objectives, and determines policies and priorities for the protection of the environment.
NACONEK should ensure that the Programme abides by the set goals and objectives of the Council.

The National Environment Management Authority (NEMA)
The responsibility of NEMA is to exercise general supervision and coordination over all matters relating to the environment and to be the principal instrument of Government in the implementation of all policies relating to the environment.
NACONEK has undertaken an ESIA for the Programme/programme for review by NEMA in compliance to the EMCA.

Standard and Enforcement Review Committee (SERC)
EMCA provides for the establishment and enforcement of environmental quality standards by a technical committee of NEMA known as the Standards and Enforcement Review Committee (SERC).

Public Complaints Committee
EMCA has also established a Public Complaints Committee, which provides the administrative mechanism for addressing environmental harm. The Committee has the mandate to investigate complaints relating to environmental damage and degradation. The members of the Public Complaints Committee include representatives from the Law Society of Kenya, NGOs and the business community.
NACONEK should address all issues arising from the Programme in accordance with the above requirements, including a clear approach to stakeholder engagement and feedback.

Water Resource Authority (WRA)
WRA is responsible for regulation of water resources such as water allocation, source protection and conservation, water quality management and pollution control and international waters. Its roles and responsibilities are as follows:

- Planning, management, protection and conservation of water resources;
- Planning, allocation, apportionment, assessment and monitoring of water resources;
- Issuance of water permits;
- Water rights and enforcement of permit conditions;
- Regulation of conservation and abstraction structures;
- Catchment and water quality management;
- Regulation and control of water use; and
- Coordination of the Integrated Water Resource Management (IWRM) Plan.

NACONEK should seek and address all the concerns of WRMA related to the development of the proposed Programme.

4.5 Relevant Social Statutes
The key social aspects of this project include GBV/SEA-H prevention, GRM, stakeholder engagement and feedback mechanism

Table 8: *Relevant Social Statutes*

Social element	Legal/Regulatory framework	Institutional framework	Relevance
Gender-based violence and SEA	-Sexual Offences Act, 2006 -Penal Code -HIV/AIDS Prevention and Control Act 2000 -Protection Against Domestic Violence Act, 2015 -Prohibition of Genital Mutilation Act, 2011 -National Gender and Equality Act, 2011	-The State Departments of Gender in the Ministry of Public Service and Gender -National Gender and Equality Commission (NGEC) what is their specific role, please highlight	The project will put in measures to ensure protection of workers and communities from the GBV/SEA-H risks
Public participation and consultations	-CoK, 2010, Article 10(2) a, b -County Public Participation Guidelines[4]	-Every state actor is required to apply the national values and principles whenever they formulate, implement or interpret laws and policies -A complementary right is the right to access information in Article 355	-The project will put measures in place to consult communities on the project. The use of alternative means of consultation such as call-in will to be used to engage communities -CoK 2010 confers all the sovereign power to the people of Kenya and it is exercised through delegated power by the State actors[6]
Grievance redress mechanism	-Employment Act in Part XII -Employment and Labour Relations Court Act -Labour Relations Act	-State Department of Labor (MLSP) -National Employment Authority -Kenya National Labor Board -Wages Council(s) -Directorate of Occupational Safety and Health Services -National Council for Occupational Safety and Health (NACOSH) -Commission for the Administration of Justice -Ministry of Health	-The project will put in place a GRM that will allow the PMT to manage grievances related to the project especially for the workers. However, in case the complainant is dissatisfied with the decision made, he/she can make use of any of other institutions with a mandate to address disputes.
Child Labour Risks	Child Rights Act (Amendment Bill) 2014	-County Children's Office	This Act of Parliament makes provision for parental responsibility, fostering, adoption, custody, maintenance, guardianship, care and

Social element	Legal/Regulatory framework	Institutional framework	Relevance
			protection of children. It also makes provision for the administration of children's institutions, gives effect to the principles of the Convention on the Rights of the Child and the African Charter on the Rights and Welfare of the Child. The contractor under this Project will be required to comply to provisions of the Act during Project implementation

4.6 African Development Bank Safeguard Policies

IMPReSED will be implemented in strict adherence to the requirements of the African Development Bank Operational Environmental and Social Safeguards. The Banks's 5 Operational Safeguard Policies will be triggered as outlined and summarized in the Table below.

The OS1, Environmental Assessment (EA) is triggered because all Programmes proposed for AfDB's financing must undergo environmental and social impacts assessment. They must also be environmentally sound, sustainable, and must have their adverse impacts mitigated.

Programme triggers **OS3, on Preservation of Biological Diversity and Conservation of Ecosystems.** This is because there will be need to avoid or if not possible, reduce and minimize impacts on the biodiversity. The triggering will be caused by excavation during the construction works of agricultural activities that will require some level of clearing or cultivation of land.

OS4, Pollution Prevention and Control, Greenhouse Gases, and Hazardous Materials will be triggered as direct negative impact of the Programme. The agricultural, construction and transportation activities involved in the Programme as designed cause pollution. Thus, the pollution impacts that may arise from use of farming chemicals including fertilizers, herbicides and pesticides will be mitigated in accordance with OS4.

Finally, **OS5, on Labour Conditions, Health and Safety** will be triggered because IMPReSED involves working with people, especially local communities. Accordingly, it is important that labour conditions, work environment, as well as health and safety conditions are taken into consideration.

Table 6.3: *AfDB's Operational Safeguards triggered by the Programme*

Operational Safeguards Triggered by The Programme		**YES**	**NO**
OS1 -Environmental Assessment		X	
OS2 Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation			X
OS3 Biodiversity and Ecosystem Services		X	
OS 4: Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials		X	
OS 5 Labour Conditions, Health and Safety		X	

Table 9: *Applicable AfDB Safeguards*

Safeguard Policies	Provision	Relevance to the Project
OS 01 -Environmental Assessment and management of Environmental and Social risks and impacts	The policy seeks to contribute to sustainable development by ensuring that the project is environmentally and socially sound. It provides for environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making	The project is assigned as a category B Partial Assessment – The proposed project presents potential environmental and social impacts during the implementation of the project i.e. construction, operation and decommissioning phases. The client is to ensure compliance with the requirement set out in the triggered WB OP 4.01 and as such is required to identify ES risks and impacts and ensure that the appropriate mitigation measures are put in place for management of ES risks. The policy also sets requirement for putting in place a GRM and ensuring that stakeholders are consulted on the project and that there is adequate disclosure of project information *The ESIA has included all the issues and items specified in this ESS. In addition, NACONEK is required to conduct environmental and social monitoring of the Programme activities for the entire Programme life-.*
OS 6-Physical Cultural Resources (PCR)	Provides for measures to protect cultural heritage from the adverse impacts of project activities and support its preservation;	PCR policy is triggered since construction activities due to excavation can lead to likely impacts on the Physical Cultural Resources which are protected by law There is no physical cultural resources (includes resources of archaeological, paleontological, historical, architectural, religious (including graveyards and burial sites), aesthetic, or other cultural significance) that will be affected near the project site. However, the ESIA has provided chance find procedures to be adopted by the contractor in the case of chance find during construction activities *During the public consultation consideration is made to culturally important sites such as burial sites as protected areas and the possibility that there may be burial sites within the Programme area. This will ensure that the integrity of such sites is not compromised There will also be employment of Chance-Find procedures where civil works are expected.*
OS 5 labour Conditions, Health and Safety	This ESS aims at ensuring that the Programme/Programme workers are aware of their rights and are provided with fair and acceptable working conditions.	• Develop and implement written labour management procedures applicable to the Programme/Program. • Provide the Programme/Programme workers with information and documentation that is clear and understandable regarding their terms and conditions of employment, consistent with the national labour and employment law as well as those arising from the requirements of this ESS. • Base on the principle of equal opportunity and fair treatment when recruiting Programme/Programme workers and ensure no discrimination with respect to any aspects of the employment relationship.

		• Avoid employment of children below the minimum age (the age of 14 according to this national law specifies a higher age). A child over the minimum age and under the age of 18 may be employed or engaged in connection with the Programme only under appropriate conditions. • Desist from the trafficking of any person or use of forced labour in connection with the Programme/Program. • Develop and implement procedures to establish and maintain a safe working environment, including workplaces, machinery, equipment and processes under its control.
OS 7 resource Efficeiency and Pollution prevention Management	This ESS requires NACONEK to consider ambient conditions and apply technically and financially feasible resource efficiency and pollution prevention measures in accordance with the mitigation hierarchy	*NACONEK and the Contractor(s) once appointed are supposed to use the required resources in the most feasible and appropriate efficient manner, any form of wastage should be avoided.* *The Programme/Programme activities design and technology to be used has to be selected putting into consideration the elements of resource efficiency and pollution prevention. In addition, NACONEK and the Contractor(s) should implement the recommendations provided in the Impact Assessment Chapter and ESMMP of this report to further effectively manage the potential negative impacts, including pollution, associated with the proposed Programme.*

CHAPTER FIVE

5.0 PROJECT ALTERNATIVES

This section analyses the project alternatives in terms of site, design and technology, management options and shall involve studying the design alternatives and analyzing them based on the environmental costs and benefits. This shall involve studying the technology, design, capital investments, operation and maintenance requirements among others.

5.1 Site Alternatives

5.1.1 The Proposed Project Alternative

The proponent may consider using the project funds to construct other facilities like hostels, more classrooms on other sites (apart from the proposed) in selected counties within the country. This however would involve long processes of acquiring the necessary resources such as land and other approvals. Thus, the proposed sites are deemed the best as no other approvals or acquisitions are necessary and lookind at the mandate of the client to serve the restricted area of operations.

5.1.2 Relocation Alternative

Relocation option to different sites for the sub-projects is not an option for the project. The proponent has no alternative sites. The proposed project is well in line with the mandate of the implementing agency NACONEK. Purchasing land in the project areas would be too expensive for the proponent. In consideration of the above concerns and assessment of the current proposed sites, relocation of the sub-projects is not a viable option. The problem is further aggravated by the fixed characteristics of land and the bottlenecks of the planning policy.

5.1.3 The No Action Alternative

The No Action Alternative in respect to the proposed project implies that the status quo is maintained. This option is the most suitable alternative from an extreme environmental perspective as it ensures non-interference with the existing conditions. The development of the subject project will be having significant negative impacts especially to the natural vegetation and may also pose a threat to pollution of the spring adjacent to the subject plot.

This option will however, involve several losses both to the project proponent and other stakeholders; society and Government. The No Project Option is the least preferred with reasons such that there will be no incremental educational facilities, forfeiture of economic benefits that would accrue to the public and the government, and it could also discourage investors.

From the analysis, it becomes apparent that the No action Alternative is not the appropriate alternative.

5.2 Alternative Design

Various alternative designs and technologies have been evaluated by the proponent and various professionals involved i.e., the architect, engineers, hydrologists, Agriculturalist, surveyors and environmental consultants. After extensive discussions and relevant considerations, the various options were assessed and the most optimal designs and technologies were agreed as per the proposed plans, materials and technology. This was informed by the Needs Assessment Report and NACONEK Mandate.

The proposed sub-projects will be constructed using modern, locally and internationally accepted materials to achieve public health, safety, security, social and environmental aesthetic requirements. Equipment that saves energy and water will be given first priority without compromising on cost or availability factors. Concrete structures such as pillars and walls will be made using locally sourced stones, cement, sand (washed and clean), metal bars and fittings that meet the Kenya Bureau of Standards requirements

5.2.1 Alternatives to construction of sanitation Blocks

This involves the construction of underground concrete-made tanks to store the sludge with soak pits. It is expensive to construct and regularly emptying in large discharge points especially within the prposed project sites, since the location of most of the sites do not have enough exhaust tvehicles to that will help in operation and maingtgainance of the facilities. Given the kind of liquid waste emanating from the proposed project this option is not preferred since it will be uneconomical.

The alternatives design on toilets would be the use of VIP toilets or dig the latrines but this would depend on the budget available and the soil type of the areas where the project is being implemented

The other alternative would be to explore the option of a biodigester but this would depend on the no of users per facility, the users being knowledgeable on bio- digester use since it's a new technology and maintenance could be very expensive

Alternatives to construction of boreholes
The alternative to boreholes in the ASAL areas would be the use of the sand dams, shallow wells, water harvesting options because of the nature of the ASAL areas being a dry area, exploring other alternatives would be expensive the project areas being ASAL areas.

The alternative to renovating the classrooms; Renovation could be very costly vis a vis doing a new construction as some classrooms are in vast dilapidated state which could cost the project a lot of money

Micro irrigation alternatives are really dependent on the availability of land of between 2 to 10 acres and the implementation ofthis will be determined by land available which could prompt alterternatives to sites .

5.3 Sites Selection alternative

The programme considered alternative sites selection. Farming and micro-irrigation of community lands was considered against use of school lands. Community lands was realised

to be requiring land ownership documentation and is more prone to conflict than use of school lands. Another consideration made is which counties were most appropriate to site the programme activities. 12 counties were selected out of 18 counties for implementation sites of the programme. Criteria for choosing sites and 12 counties out of the 18 conties for this programme are based on consideration of the following criteria:

- **Education:** Access, GER/NER (OOSC), Performance, School density, PTR, GPI, security, completion and transition;
- **Socioeconomic:** Poverty Index, Distance, Population density, area security, community consent of land usage, willing and consent to participate in the program, Other multispectral interventions, coordination and approval bu Ministry of Interior, Ministry of Health, Ministry of Youth and Gender, Other agency interventions to coordinate with such as CBOs, NGOs, UN Agencies;
- **Biophysical:** Water availability and accessibility, Other multisectoral interventions, coordination and approval by Ministry of Agriculture, Ministry of Water, Kenya Forestry Services;
- **Porridge for schools innitiative:** Bungoma, Nairobi, Isiolo, Garissa, Wajir implement porridge for schools' initiative.

5.4 Program Implementation Mechanism

Implementation mechanisms alternatives considered include exclusive implementation of programme activities by NACONEK or whether to share implementation mechanisms and responsibility with other institutions and partners. The option of implemting the programme with other institutions and patners was seen as the most feasible option. The main reason for choosing this implementation mechanism is to tap the expertise of these institutions and partners.

The proposed program will be implemented by NACONEK with the support of the ministry of education, including where needed Teachers Service Commission (TSC), Kenya Institute of Curriculum Development (KICD), Kenya National Examination Council (KNEC), Kenya Institute of Special Education (KISE) and Teachnical and Vocational Education and Training (TVET) to provide technical support such as interventions for learners with special needs and capacity building of teachers and headteachers. NACONEK may also engage Ministry of Trade to support micro and small enterprises, Ministry of health to support Health for Schools, Ministry of Agriculture to support school greening initiatives, Ministry of Public Service to support production of low carbon materials, Ministry of Interior to support with coordination.

NACONEK is the main Implementing Entity (IE) for Component 1, increase equal access and participation in education and improve learning outcomes in target counties. NACONEK and TVET are the main IE for Component 2, increase Skill Development and Employability of OOSC. NACONEK and relevant Ministries including Trade and Agriculture are the main IE for Component 4, increase community resilience with sustainable livelihoods to support participation in education. NACONEK is the main Implementing Entity (IE) for Component 4, strengthening institutional capacity.

The roll out of integrated digital interventions will be in consultation and supported by KICD, KNEC and TSC. NACONEK will work in close collaboration with the Office of the Refugee Affairs Secretariate and United Nations High Commissioner for Refugees (UNHCR) in matters having to do with host communities and camp-based refugee schools.

5.6 Summary on Preferred Options

The proposed project on the proposed sites remains the most viable and appropriate after considerations of the various alternatives.

In terms of technology options for construction of classes, climate smart infrastructure that takes cognizance of ventilation and temperature moderation was considered against higher and cooler infrastructure development technologies.

Cheaper inter-locking blocks making machines was considered against brick-and-mortar technologies using a lot of cement and concrete.

Design options also considered include raised roof and large window size for air circulation and ventilation against lower roof ceiling and smaller window size. Raised roof and large window sizes of classrooms design is best for hot environments like most of the programme site areas of ASAL in Kenya.

The chosen alternative design and technologies result in enhanced conservation of resources - e.g., use of reservoirs that buffer as much water as possible, e.g. the open ponds and adopting reservoirs that are hidden from evaporation e.g. Sausage tanks that are underground or the open ponds that are covered by shade nets.

The chosen design and technologies option emphasizes on use of materials that are weather proof e.g., compressed roofing recycled plastic roofing materials. They are strong and therefore do not break easily and yet their runoff coeffient is very high (above 90%).

Use of eco friendly materials such as eco tiles and blocks that are made of recycled plastic making them durable since they are breakage free, unfoldable, flame resistant, sound proof (rain noise), moss and weed resistant making it safe for water harvesting.

VIP toilets was considered because it's the cheapest option available and knowing that most project areas are not having sewer network, it was very costly to do aconcreat septic tank and looking at the capcity the institution server, septic tank would easily fill up

CHAPTER SIX

6.0 PUBLIC CONSULTATION AND PARTICIPATION

6.1 Introduction

The AfDB safeguard policies, the Constitution of Kenya (2010), Environmental (Environmental and Social Impact Assessment and Audit) Regulations, 2003 (Revised in 2016 and in 2019), the Legal Notice Number 31 and 32 of 2019 and the EMCA (2015) require that the views of persons who may be affected by a proposed programme be sought during the process of conducting an ESIA.

This *Chapter* presents a summary of the stakeholder engagement undertaken as part of the ESIA process. It also serves as a summary of a more detailed Stakeholder Engagement Plan (SEP) which presents the engagement approach and identifies stakeholders and the mechanisms through which stakeholders have been engaged.

Specifically, on this project, stakeholder engagement entailed an interactive process where input of key stakeholders such as project affected communities, Entities, district technical officials, political leaders, government regulatory institutions, other interested parties and key implementing partners was sought and incorporated in the planning process as early as possible. Information disclosed included details of the purpose, nature, location, duration, the project benefits and adverse impacts, as well as the proposed enhancement and mitigation measures.

6.2 Objectives of Stakeholder Engagement

The objectives of consultations during the ESIA study were to share project information with key stakeholders, to raise awareness, obtain baseline information, and to allow stakeholders the opportunity to make comments and express their views on the proposed project.

The specific aims of the Public Consultation and Participation process during the ESIA at the design stage include:

- To inform the local people, leaders and other stakeholders about the proposed IMPRESSeD programmes and its objectives
- Obtain the main concerns and perception of the community and their representatives regarding the Programme
- To promote Project ownership by the operator and beneficiaries in order to minimize conflicts
- Obtain opinions and suggestions from the directly affected persons on the Project impacts and best suited measures to mitigate them.
- Obtain opinions and suggestions on the Project concept, designs, etc. and therefore minimize conflicts and delays in implementation
- To increase long term Project sustainability and ownership
- To reduce problems of institutional coordination, especially at the different

Detailed information was shared to assist in understsnding the programme by explaining the below to the stakeholders:

- the background to and description of the IMPReSED Program;
- information on the Programme proponent;
- the environment in which the IMPReSED Programme will be developed;
- information on the ESIA process and timelines; and
- potential impacts associated with the IMPReSED Program.

This aided improving decision-making by tapping on local knowledge and information through the involvement of individuals, groups and organizations with a stake in the proposed programme

6.3 Stakeholder Engagement Plan

6.3.1 Stakeholder Mapping

Stakeholder consultations were conducted at all the various stages of project planning including; inception, during detailed field studies and are expected to continue throughout the implementation phase.
The engagement focused on 4 levels which is Multisectoral National Stakeholder consultation, County level stakeholder consultaion, community leaders' engagement, as well as the identification of interested and affected stakeholders.

The Table below identifies the stakeholder and engagement level

Table 7.1 Range of stakeholder groups that have been identified and included within the stakeholder engagement process to date.

Level of Engagement	**Stakeholder Group**
Multisector National Level Stakeholder Consultation	i. Ministry of Education (MoE) including Teachers Service Commission (TSC) ii. Relevant Semi-Autonomous Government Agencies (SAGAs) such as - Kenya Institute of Curriculum Development (KICD); - Kenya Education Management Institute (KEMI); - Kenya Institute of Special Education (KISE); - Kenya National Examination Council (KNEC); - National Council for Nomadic Education in Kenya (NACONEK); - Centre for Mathematics, Science and Technology Education in Africa (CEMASTEA). - National Drought Management Authority, iii. Ministry of Health (Public Health) iv. Ministry of Water and irrigation v. Ministry of Trade (Medium and Small Enterprises Authority - MSEA) vi. Ministry of Agriculture (Kenya Agricultural Livestock Research Organisation - KALRO) vii. Ministry of Public Service, Youth and Gender Affairs (State Department of ASAL, viii. Ministry of Labor and Social Protection
County Level Stakeholder consultation in the NACONEK mandated counties.	i. County Directors of Education ii. County Directors of TSC, and iii. County staff from line agencies such Social Protection, Public Health, Public Works, iv. National Council of People with Disability (NCPWD), v. NEMA,
Local authorities in the NACONEK mandated counties.	i. Administrative and Customary authorities such as Village Elders ii. Local community leaders acting as representatives of their local
Communities in the NACONEK mandated counties.	i. Programme affected communities including: ii. Registered and customary land owners; iii. Residents and occupiers of land; and iv. members who use or access to land and resources. v. parents, vi. learners and youth, vii. CBOs, viii. teachers and head teachers,

Level of Engagement	**Stakeholder Group**
Vulnerable groups	Women i. The Youth ii. The elderly. iii. Hunters and gatherers iv. PLWDs, v. Young Girls
Civil Society	i. Community Based Organisations ii. Churches iii. Schools iv. Health Centres v. Supreme Council of Kenya Muslims (SUPKEM) vi. Maendeleo ya wanawake vii. Kangemi resource centre viii. New dawn pacesetters (Samburu, Isiolo & Laikipia); ix. Hunters & gathers association x. Elimu yetu coalition

6.3.2 Stakeholder Engagement Process

The stakeholder engagement mechanisms employed during this study included

- Planning and information sharing meetings with Multi- Sectoral National stakeholders,
- Self administered quesstionnares
- Focused group discussions/Community Meetings

A total of Five (5) institutional meetings were conducted and 13 community meetings were conducted across the NACONEK Mandated areas. Records of the meetings conducted both in the Scoping and ESIA engagement phases (including the attendance registers) are included in *Annex B4* and photos are presented in *Annex B5*.

Table 7.2 *Shedule of Institutional/Planning/MultiSectoral National stakeholder*

	Date	***Institution***	***Venue of***	***Summary meeting***	***No of Participants***
	July 26th - 30th 2021	Kenya Education Management Institute-KEMI	Nairobi	Technical meeting with NACONEK and the Ministry of Education Technical Team Planning of consultative meetings	***13***
	August 16th – 19th 2021,	Key Government Focal Implementing Partners	Naivasha	**1st workshop** Introduction meeting with Multi-sectored Government Focal Group to inform, mapping of key convergence areas, and publicize the programme and its intended effects and benefits.	***33***
	September 6th – 13th 2021.	Key Government Focal Implementing Partners	Naivasha	Follow up meeting with Multi-sectored Government Focal Group to inform, mapping of key convergence areas, and publicize the programme and its intended effects and benefits.	***33***
	February 14th 2022	Webinar Dialogue Ministry of Health	Online	After the Health Workforce in Conference 2022, a webinar was organized with the Ministry of Health (Department of Primary Healthcare and Director of Health for School Program) and UNFP for preventative healthcare strategies for community and schools through a webinar. - Community Health Worker presentation by Dr. Salim Hussein, Head of Department of Primary Health Care at Ministry of Health Kenya - School Health Presentation by Mr. Alex Matua, School Health Coordinator at the Ministry of Health Kenya Poverty Tool presentation by Professor Richard Muga, Homabay County Health Executive Girls health and MHM Presentation by Ms. Faith Osore, UNFPA	***30***
	April 4th 2022	Participants from National Drought Resistance Authority Ministry of Devolution and ASALs Commission of higher Education TSC KNEC	Nairobi- Hilton Hotel	Introdusction of impressed programmes and align indicators to MTP$ Enhance linkages for both national and County level programmes	

Table 7.3 *Schedule of community meetings/Focused Group Discussions*

	Date	County	Category of meeting		No of participants
	July 6, 2021	Garissa	Kuno Site Visit	Community consultation meeting School Site Visit Farm site visit Forest site Visit Water solutions site visit	44
	1st October – 30th November 2021	Bungoma	Kimwanga- NACONEK Home Grown Solutions, Food and Nutrition Unit	Consultative meeting btween NACONECK team and Home grownin line with roll out of farmers to have sustainable development solutions in farming	230
	October 14th 2021	Kilifi	Kilifi Community Leaders-Conservation Park Sokoke Forest	Meeting with 6 Community Leaders of the Friends of Sukoke to discuss community and education challenges. Site visit of Conservation area Forest Community and School Site Visit	50
	1st November 2021	Nairobi	Kangemi Resource Center	Introduction of IMPRESSeD programmes Listen to the needs and concerns of community Link priorities of communites to IMPRESSeD intervations Discuss any social and Enviromental Impacts	100
	8th /9th December 2021,	Samburu	• 100 samburu community women • school representative • Segero Mission representatives • Indeginous women leaders	Introduction of IMPRESSeD programmes Listen to the needs and concerns of community Link priorities of communites to IMPRESSeD intervations Discuss any social and Enviromental Impacts	38
	March 10th, 2022	Online/virtual	Isiolo, Marsabit and Nairobi – Virtual Meeting	Introduction of IMPRESED Components and Activities Identifying context specific needs of Isiolo and Nairobi and leveraging ongoing interventions in regions. Brainstorming and comments EACHRIGHTS, VSO, APBET, ECDE and Vocational Training Isiolo, Hunters and Gatherer Association	30
	March 22nd, 2022	Bungoma Kimwaga CIDC	Kimwaga Farmers Soya farming project	Introduction of IMPRESSeD programmes Listen to the needs and concerns of community Link priorities of communites to IMPRESSeD intervations Discuss any social and Enviromental Impacts	69

	March 22nd 2022	Mt Elgon Sub County	Kopsiro Farmers assocation	Introduction of IMPRESSeD programmes Listen to the needs and concerns of community Link priorities of communites to IMPRESSeD intervations Discuss any social and Enviromental Impacts	29
	April 6th, 2022	Virtual/Online	Public participation virtual meeting	To inform of need of rolling out the impressed activities in targeted schools in Marsabit county To establish viability and sustainability for implementation of IMPRESSeD proramms Discuss any social and Environmental impacts	7

6.4 : Summary of Public Consultations Findings

During the stakeholder and public consultation meeting, the following are the matters that were discussed in brief.

Environmental issues and risks identified	
Issue Raised	**Response Given**
Increased demand for fuel wood for the school meals presents the risk of child labor and environmental degradation especially in ASAL areas where availability of fuel wood is a challenge.	We need to ensure the energy saving jikos and briquettes will be available to schools.
Increased demand for water presenting a risk of increased pressure on the available water resources especially in the ASALs. This may also lead to the risk of child labor where learners are requested to carry water for food preparation.	Creating a system to ensure schools participating have access to water.
Climate change related impacts such as excessive rainfall leading to mudslides and flooding, that adversely affect school infrastructure and cause disruption in learning activities.	It is important to ensure the planned school infrastructure are climate proofed.
Need for Provision of a fence around schools.	As this has resulted in increased incidences of insecurity and theft of building materials resulting in schools incurring additional expenses.
The risk of flooding of neighboring homes and other infrastructures such as roads because of the large surface provided by the school roofs and lack of appropriate storm water drainage channels in schools	The stakeholders recommended that designs of proposed school infrastructure to provide for roof water harvesting and storage.
Unavailability of adequate land for establishment of school infrastructure	may necessitate the MoE to consider storey building during the design of school infrastructure.
School Land issues;	may need to work with counties to develop a strategy to ensure schools in community land have land titles.

Social issue and risk identify	
Sensitized on the importance of education	in pastoral communities so that they can appreciate the value of education and minimize engagement of learners in their pastoral lifestyle, especially in counties such as Turkana.
Sustainability challenges.	Make sure there is proper management of income generating activities so that the Programme can incorporate sustainability measures in all activities.
Lack of **guidelines for handling and disposal of sanitary waste** in schools presents the risk of pollution.	Presently the sanitary waste is disposed in pit latrines causing the pit latrines to fill up quickly. There is need to improve on sanitary waste management.
Ineffective communication and disclosure of programme information may lead to increased complaints and grievances from stakeholders.	For instance, the selection criteria for schools chosen needs to be robust as well as effectively communicated and disclosed to stakeholders.
School fires as a result of the school meals programme presents safety risk to learners and school infrastructure.	This is a growing concern given the ongoing unrest in schools and increasing incidences of school fires by learners.
Insecurity: This is especially prevalent in Turkana County along its local and international borders. Such insecurity normally disrupts school progress especially in areas around Kibish, Loima, Kapedo, Oropoi and Kainuk and access to education for children in those areas.	To address this, the MoE should adopt the multi-agency collaborations in handling insecurity
Long distances to and from schools and poor road networks: vastness and terrain affect access to schools in areas such as Mt. Elgon and Turkana. This contributes to late learner enrolment and attendance to schools and, in some cases, dropout from school at early stages.	To address, the stakeholders recommended the need to build more schools to reduce the distance travelled.
Participants noted that efforts aimed at facilitating learner's re-entry and reintegration in schools are constrained by lack of caregivers for the babies and limited access to financial resources for child support.	To address the challenge, the following were recommended: • Sensitize parents and caregivers on positive parenting to enable them to accept to support the young mothers. • Pilot provision of caregiver services within the school to allow for the young mothers to learn. This can be modelled around the Safaricom's caregiver services, which has been a success. • MoH should give learner friendly advocacy services on sexual and reproductive health.

	• MoE to ensure provision of psychosocial support to learners who have experienced teenage pregnancies.
MoE needs to ensure that schools provide a disability friendly environment. The limited access to requisite assistive devices, disability-friendly infrastructure has limited access to education for children with disabilities.	In addition, MoE needs to ensure that teachers need to have basic skills for engaging learners with special needs and disability as this will go a long way to facilitate integration of such learners. MoE can enhance these efforts by: • Sensitizing parents with disabled children to encourage such learners to attend school, • Facilitating access to bursaries and scholarships for disabled learners as in most cases such learners are not considered. • The MoE to ensure effective collection of up to date data on the number of disabled children and type and form of disabilities to inform planning and effective inclusion of learners with special needs in the education programs. • Based on the data, MoE to review its policies and guidelines so as to factor issues of disability issues.
The current unrest in schools has been attributed to the policy of no capital punishment in school as well as inadequate number of teachers to provide counselling support to students. This has led to a few students being taken to court and ultimately to jail, hence impeding learning and hindering their career development.	To address, the following were recommended: • Review the policy on capital punishment in schools with a view to documenting experiences, lessons learned and developing ways for disciplining errant learners; • Provide more teachers in schools to offer psychosocial support to learners; • Engage stakeholders such as gender and social protection department to widen provision of psychosocial support to students; • Sensitize teachers on alternative forms of positive discipline whose uptake remains low; and • Sensitize parents and caregivers on positive parenting and disciplining strategies.
Drugs and substance abuse and adverse impacts of tourism have affected schooling in coastal towns and along the lake shores. High poverty rate is among the main cause of learners engaging in sex tourism and drugs and substance abuse.	The stakeholders identified enforcement of the Children Act as priority in addressing these social ills and recommended that: • The MoE to work with the Ministry of Tourism to develop policies and measures to address sex tourism in hotels. • Both Ministries to work with hoteliers to prohibit child sex tourism.

Prevalence of child and forced labour, which affects access to education: the stakeholders noted that child labour varies depending on the specific County's economic activities. Examples of child labor include engagement in economic activities such as gold mining in Siaya and Nariomoru in Turkana, boda-boda business, ferrying illicit brews, sand harvesting, farming, and fishing. All these have led high school drop-out rates.	Measures recommended to address this are**:** • Develop a multi-sectoral approach in mitigating child laborur/forced labor. • Enhance enforcement of the law on child labour related issues.
VMG issues and risks	
Inclusion VMG communities:	While the MoE has in the past ensured effective representation VMG and IP communities in interventions, there is still need for such communities to have access to programme benefits and that they are routinely consulted on activities.
Lack of basic infrastructure such as water, electricity, teachers housing in many of the hard-to-reach schools located in IPs and VMGs communities	It was therefore recommended that the design of school infrastructure to be done under the Programme needs to be comprehensive to allow for provision of water harvesting, source of energy, teacher houses.
Some schools are also inaccessible due to poor road network which has impeded learning and delivery of construction materials.	The stakeholders recommended the MoE to engage Kenya Rural Roads Authority (KERRA) and County Departments of Public Works to consider the aspect of access roads to school.
The wide digital divide amongst schools, which was manifested during the lock-down needs to be addressed. Digital learning in many of the schools in rural areas was impeded by the lack of electricity and internet connection.	Thus, connection of schools to electricity, provision of internet and training on digital skills were recommended as some of the ways to address the digital divide.
Nomadism is a serious impediment to access to basic education affecting schooling for learners from pastoral communities leading to high school dropouts and low completion rates.	
There is also increased cases of parents taking advantage of **teenage pregnancies** to marry off the young girls to elderly men thus constraining the re-entry and re integration efforts of MoE.	It was recommended that more advocacy and awareness on the policy and benefits of re-entering the learners back in school be undertaken.
Limited access to medication by learners with long-term health conditions such as HIV/AIDS, Asthma, Diabetes, is a barrier to schooling participation.	It was recommended that the MoE to liaise with MoH for a more consistent treatment support including provision of psychosocial support to learners with long-term health conditions.
Due to the **increasing cases of land disputes** affecting schools, the MoE reliance on community land donation. This approach is becoming ineffective due to land scarcity.	Thus, the MoE and its partners should consider buying land to build school as private land for sale is readily available.

Increasing cases of school unrest and destruction of school property: It was noted that there are increasing incidences of school unrest that in some instances, instigated by teachers.	MoE to engage stakeholders in identifying appropriate strategies for handling such cases.
Teacher shortages especially in ASAL counties: stakeholders observed that there are serious teacher shortages in some areas especially those inhabited by the Sengwer and Ogiek communities. Parents are forced to hire teachers whom they cannot sustain as their income levels drop thus impeding learning in such schools. The challenge of **teacher shortage** is further amplified by the lack of decent teacher housing especially in remote areas.	It was recommended that TSC/ MoE increase the number of teachers is these areas. On teacher deployment, it is important to ensure that teachers from VMGs communities to remain in specific schools as they are familiar with the local conditions (insecurity, distance covered to access schools, poor roads etc) of the area instead of employing teachers from other areas of the nation who immediately seek for transfer. It is important to consider teacher housing/accommodation as part of school infrastructure under the proposed programme especially in VMG areas.

CHAPTER SEVEN

7.0 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND MITIGATION MEASURES

This section identifies the potential social and environmental impacts of the proposed programmes in terms of the nature, magnitude, extent and location, timing and duration of the anticipated impacts. These impacts may relate to the project design stage, construction stage or the project operation and decommissioning stage. Based on impact prediction methods, site visits and observations and the results of public consultations, both beneficial and adverse environmental impacts have been identified. These are then costed and responsibilities for their implementation assigned as appropriate within the Environmental and Social Management Plan (ESMP).

7.1 PROPOSED PROGRAMME INFRASTRUCTURE ACTIVITIES

7.1.1 PROPOSED WATER DEVELOPMENT ACTIVITIES

Baseline Condition

In the ASAL regions rainfall is scarce, water reliability is a luxury. Soil is porus and water seeps down to bedrock. In certain regions, there are pleanty of underground water sources. Communities walk more than 5 Kilometers a day to access a water source, usually what would be considered non-potable water. During drought season, demand for water for livestock can cause social instability within pastoralist communities. In pockets of povety regions and urban informal settlements, rainfall and access to city water is more frequent, but access to water, water storage and clean water are still considered a challenge.

Proposed project activities

Water development activities include:

1. Borehole drilling and installation of solar and purification set up
2. The installation of 2–5-acre micro-irrigation schemes at selected sites,
3. The construction of rainwater roof catchments in selected sites,
4. Construction of sausage tanks or construction of truncated water pond for storage of water at selected sites.

Sensitive receptors

The main sensitive receptors for this impact are the local community members who will rely on the above-mentioned water sources to meet their domestic water needs.

7.1.2 PROPOSED AGRICULTURE (SCHOOL FARM) ACTIVITIES

Baseline condition

In the ASAL regions, the community and schools have not usually developed their land for agricultural purposes due to lack of availability to water. Having access to water it will be easier for them to to grow produce and water their kitchen gardens. The land is fertile and should be kept organic to not add any chemicals to the soil. In the pocket of poverty regions rain is usually more available, having the ability store water for irrigation and micro farming will have a huge impact in the school having additional healthy food to eat and the community participating in farmer field schools. In the urban informal settlmentes, vertical kitchen gardens will support the school with food to supplement what is served. In all these conditions, surplus of food growing can be taken to market and community members can also participate in food growing activities.

Proposed project activities
Agriculture activities include

- The planting (Intercropping) of trees, grasses (fodder) and food crops with the use of organic inputs and fertilizer.
- The proposed programme involves farming activities of schools in eighteen counties.

Soils will be affected by farming activities such as ploughing. Farming and specifically construction of irrigation structures will affect soil fertility during operation phase. Farming activities such as ploughing of soils will also affect drainage channels. Impact associated with blockage of the natural drainage channels is increased soil erosion and as storm water opens up new channels. Construction will have impact of soil compaction and erosion.

Sensitive receptors
The receptors for this impact will be the soils in the ploughed areas and construction area. during the construction phase will be "**Moderate Negative Impact**" pre-mitigation

7.1.3 PROPOSED ENERGY DEVELOPMENT ACTIVITIES

Baseline condition
In the ASAL areas, Pockets of poverty regions and Urban Informal Settlements, a large percentage of schools continue use firewood or charcoal for cooking. This has contributed to tree abstraction and increase of GHG emissions. Additionally, a large portion of the annual school budget is spent on firewood or charcoal. Through providing alternative green cooking technologies the school will be able to cook at lower cost, faster, cleaner and with a reduced carbon footprint.

Proposed Project Activities

- Instalation of Energy Saving Jiko or Steam Cooker in school kitchens.
- Installation of 1-ton silos for storage of food.

Sensitive Receptors
The main sensitive receptors are the local community members in the project area, as well as the workers. Human exposure to gaseous and dust emissions is associated with respiratory infections.

7.1.4 PROPOSED REHABILITATION ACTIVITIES

Baseline Condition
In the ASAL regions, many learning institutions lack fencing with is a safety risk to girls and to the school. The school interiors are usually in need of improvements on walls and blackboards. In pockets of povety regions and urban informal settlements, although more freaquently fenced, schools can also be in dire need of an upgrade as the walls are pealing and the blackboards are scratched and barely usable.

Proposed Project Activities
Rehabilitation activities include

- the fencing of institution in selected sites
- interior painting of classrooms and installation of blackboards.

Sensitive receptors
The main sensitive receptors are the local School community members at the sites, as well as the workers. Human exposure to minimal noise, gaseous and dust emissions is to be considered.

7.1.5 PROPOSED MICRO-HUB INSTALATION ACTIVITIES

Baseline Condition
In the ASAL areas acess to digital learning is limited. There is minimal access to internet and electicity. In pockets of povety regions and urban informal settlements, although there is more availabilty to electricity most schools have challenges with connectivity to support the use of digital learning.

Proposed Project Activity

- Micro-hub instalation activities include the transportation of "plug-and-play" Micro-hub container, that includes, solarized solution, external and internal lighting, storage and charging for tablets, an offline learning library serviced by a micro server.

Sensitive receptors
The main sensitive receptors to the noise impact will be the neighbourhood and community members in institutions (schools and TVETSs) in the project area.

7.1.6 PROPOSED NEW CONSTRUCTION ACTIVITIES

Baseline Condition
In the ASAL areas, pockets of povety regions and urban informal settlements, there is a shortage of dormitories for girls, toilets and classrooms. Providing new infrastructure in site specific areas will boost quality of learning and increase participation to education.

Proposed Project Activity

- New Construction activities include the construction of new dormitory/ girl Hostels in selected sites,
- the construction of a new toilet block with biodigester and handwashing stations in selected sites,
- the construction of new classrooms in targeted counties.

Sensitive receptors
During the construction phase, gaseous and dust emissions will mainly be associated with construction and renovation activities, ploughing of land for micro-irrigation farming, vehicle movements, construction machinery and vehicle engines. The main components of gaseous and dust emissions will be hydrocarbons, CO_2, NO_x, SO_x and Particulate Matter.

7.2 PROGRAMME DESIGN AND CONSTRUCTION PHASE

During the programme design and construction phase of the above infrastructure components, there is a likelihood of having the following impacts.

7.2.2 Positive Impacts

7.2.2.1 Employment Opportunities

There will be job opportunities especially to casual workers. Employment opportunities are a benefit both in economic and social sense. In the economic sense it means abundant Skilled and unskilled labour will be used in economic production. In the social sense these young and

energetic otherwise poor people will be engaged in productive employment other than remaining idle. Several workers including masons, carpenters, joiners, electricians and plumbers are expected to work on the site for a period that the project will start to the end. Apart from the skilled labourers, semi-skilled and unskilled labourers and formal employees are also expected to obtain gainful employment during the construction period.

7.2.2.2 Increased Business Opportunities

The projects will require supply of project materials some, of which will be sourced locally in the surrounding areas. Some of the materials will be prefabricated before they are transported to the site. This shall provide ready market for construction material suppliers such as quarrying companies, transporters, hardware shops and individuals with such businesses.

The large number of project staffs required will provide ready market for various goods and services, leading to several business opportunities for small-scale traders such as food vendors around the project site. The projects shall also attract more investments in the area such as recyclable material collection, catering and cleaning business as well as security service companies from the local communities.

7.2.2.3 Economic Growth

Through the use of locally available materials during the construction phase e.g. cement, steel metals and others; the projects will contribute towards growth of the country's economy by contributing to the gross domestic product. The consumption of these materials, oil, fuel and others will attract taxes including VAT which will be payable to the government hence increasing government revenue while the cost of these raw materials will be payable directly to the producers.

7.2.2.4 Enhanced learning Facilities

The implementation of the proposed projects will enhance the learning facilities institution in the education sector under theNACONEK mandated areas of Ministry of Education.

7.2.3 Potential Negative Impacts and Mitigation Measures

The key negative impacts identified include:

7.2.3.1 Impacts on loss of Vegetation (Vegetation Clearing)

Vegetation has a great effect on the general and localized environment and normally can modify the micro-climate. Usually, the flora creates a good environment for habitats thus the two may go together more often than not. In consequence, de-vegetation may result to negative effects on the fauna. Examples of vegetation that will be cleared on site include shrubs, grass, etc.

Mitigation Measures

- The contractors should avoid unnecessary clearing of vegetation by conserving vegetation not in the sections being built up,
- The contractors should ensure no or minimal disturbance to the vegetation (shrubs) near the construction site. To the extent possible, retain some vegetative stands and or avoid

cutting/interfering with shrubs and trees that grow near the facilities and provide micro-climate,
- Strict control of construction vehicles to ensure they operate in an area only to be disturbed by access vehicles.
- Restore vegetation in open sections at the end of the project

7.2.3.2 Soil Disturbance and Land Degradation

Soil erosion may occur during the drilling phase. During drilling, the site will be dug out and top soil exposed. Erosion would probably be minor for this project due to the flat terrain, permeable soils and lack of proximity to surface water drainages.

During excavations for foundations and removal of soil layer, the contractors will create soil disturbance

Mitigation Measures

- The contractors will be allowed to disturb the soil at the exact location of the buildings
- The disturbed areas round the building would be restored after completion.
- The vegetation disturbed will be restored through planting grass or tree planting in the open areas and parking areas for scenic view
- Contractors are advised to use the locally sources construction material and avoid opening of new material sites to the extent possible and source construction materials from local suppliers who use environmentally friendly processes in their operations
- Proper management of excavated spoil material to avoid dumping on un-designated areas. Re-use the excavated material/spoil for back filling and landscaping,
- Control earthworks especially if works begin in the rainy season.
- Loose soils will be compacted when necessary.
- The contractors will ensure management of excavation activities.
- Activities will be controlled especially if drilling will take place during rainy conditions.
- Provide soil erosion control structures on the steep sides during drilling

7.2.3.3 Increased Solid Waste Generation

Sources of this waste will be rejected materials, surplus materials, surplus spoil, excavated materials, domestic waste and general waste from the construction site. Poor waste management may lead to health effects, unaesthetic appearance of the place and even increase project cost. Generated waste should be appropriately managed through: identification of the waste types; segregation into the various categories; and the establishment of suitable mechanisms for collection, storage, transfer, and final disposal.

Mitigation Measures

- A site waste management plan shall be prepared by the contractors as part of their C-ESMP prior to commencement of construction activities. This should include designation of appropriate waste storage areas, collection and removal schedule, identification of approved disposal site, and a system for supervision and monitoring,
- Regularly remove and transport the construction solid waste to the designated waste disposal areas using NEMA registered waste handlers,
- Provide waste bins for solid waste collection at strategic points for ease of disposing waste

as the work progresses,

- Construction workers should be sensitized on the importance of appropriate waste handling and disposal of all construction related waste in designated areas,
- The contractor will keep records of waste disposal as proof for proper management of waste as designed, and
- Spoil dumping should be carried out in designated sites away from water resources to avoid water pollution. Care should be taken to avoid spoiling in areas that could otherwise be considered productive.

7.2.3.4 Water Pollution/Increased Liquid Waste-water Generation

There will be waste waters and effluents from the sanitation facilities as well as from the construction related activities which may likely pollute the surface and ground water sources.

Mitigation Measures

- Existing water ways, springs and wetland within and outside the construction zone should be preserved,
- Sanitation facilities should be sited away from the spring
- Ensure storm water run-off from construction site is channelled through sieve traps/rocks, hay traps to remove organic pollutants
- Install silt traps at the onset of the construction at strategic places
- The sanitation facilities provided by the contractor may be connected to the existing sewer system
- Provide workers with appropriate clean sanitary facility which can be in the form of exhaustible mobile toilets.
- Alternatively, effluent from mobile toilets should be disposed by a registered NEMA waste water handler. The waste handler should possess all the relevant waste transportation document including waste tracking documents showing the disposal site; the number of the users of the mobile toilet and distance of disposal should be considered during procurement by the contractor to reduce on secondary project impact such as exhaust emission, spillage and excessive fuel use;
- A specific area for washing of cement trucks and equipment should be identified and should not be near water bodies; and
- All equipment must be fuelled at properly designated fuelling stations.
- Lubricants and oil from the construction machinery/equipment would be contained and properly disposed by licensed hazardous waste handlers

7.2.3.5 Increased Water Demand for the Project

Both the workers and the construction operations in all the sites will create additional demand for water in addition to the existing demand.

Mitigation Measures

- Contractor should use water bowsers and tankers to bring water for construction activities especially during periods of high-water demand such as slab formation subject.
- Install a discharge meter at the outlet to monitor on water usage at the site.
- Install water conserving taps which turn-off automatically when water is not in use
- Contractors should sensitize all construction workers on means and need to conserve

water and put strict measures to avoid wastage of water. This may include putting up of notices and information signs to sensitize on means and needs to conserve water resources. Such as 'Keep/Leave the tap closed'

7.2.3.6 Reduced Air Quality (air pollution/ gaseous emissions)

Emissions in forms of dust, particulate matter, fugitive emission and, exhaustion from project machines, activities and equipment are anticipated during the projects construction phases. These emissions emanating from trucks and construction equipment are known to have negative impact on the environment, plant and human health.

- Activities likely to generate dust include speeding vehicles on earth surface not palliated with water, excavation of earth materials in dry sections;
- Activities likely to generate particulate matter include loose material transportation, vehicle and machines exhaust emissions, fire among others and Some of the particulate matter to be generated include; sand, soot, cement dust, among others; and
- Exhaust emissions likely to be generated include smoke, hydrocarbons and nitrogenous gases among other pollutants from vehicles, machinery and equipment's exhausts.

Vehicular/equipment engine exhaust emissions will be minor and temporary during construction. Air quality impacts will be temporary during construction. The project will not generate significant vehicle trips to the area. Vehicular and equipment exhaust emissions during project operations will, thus, have a minor incremental/cumulative impact locally and regionally.

Particulate matter (dust) would be generated by excavation and the movement of construction vehicles. It is not possible to accurately estimate the particulate concentration that might occur at the site because it is dependent on meteorological conditions and soil moisture.

Mitigation Measures:

- Discourage idling of vehicles i.e. vehicle and equipment engines will be turned off when
- not in direct use to reduce exhaust emissions.
- Regular maintenance drilling plant and equipment
- Engage sensitive drilling workers
- Provide Personal protective Equipment such as nose masks to the workers on site
- The contractor will water the site with exposed soil surfaces twice each day during dry weather.
- The stockpiles of earth generated during construction works and areas used for handling fine construction materials should be palliated with water regularly in order to suppress evolution of dust
- All machinery and equipment should be maintained in good working condition in order to minimize emissions to acceptable standards;
- Train construction and delivery trucks drivers on pre-cautionary measures that enable curb emissions for example advise on techniques to reduce dust evolution especially when driving in areas of dense human settlement or nearing the project site to avoid creating dusty conditions; techniques to conserve fuel and reduce emission by switching off the engines when vehicles are idling;
- Construction trucks delivering materials to site should be covered with tarpaulins in order to minimize spread of fugitive emissions to the surrounding areas;
- No burning of materials should be permitted at the project site;
- Use clean energy to fuel project vehicles, equipment and machines in order to reduce air pollutants; and

- Limit traffic movement within the earmarked project areas.

7.2.3.7 Risk of Accidental Leaks and Spills

The projects equipment's and vehicles will use fossil fuels and thus will require protection from leaks and spillage. Fossil fuel presents both environmental and fire risks. Release of hydrocarbons to the environment has several impacts including sub-soil and groundwater contamination; air pollution, fire and effects on human health due to dermal contact, inhalation or ingestion. However, the risks of major oil spillages occurring in the project area are minimal.

Mitigation Measures

- All machinery must be keenly observed not to leak oils on the ground. Maintenance must be carried out in a designated area (protected service bays more suitably outside) and where oils are completely restrained from reaching the ground.
- All oil products and materials should be stored in site stores of contractor's yard and should be handled appropriately to avoid spills and leaks.
- Investigate the possibility of fitting catalytic converters in machines with engines so as to convert harmful substance in the exhaust fumes to less harmful substances;
- Safety procedures for fuel storage and re-fuelling should be well understood and implemented by site staff; and oil residuals including waste oil, lubricants, used filters, should be carefully collected and stored for safe disposal, in order to prevent spillover effects of contaminant hydrocarbons into storm water or groundwater resources;
- Contractor will use drip trays to collect waste oil and lubricants from stationary plant such as generators or concrete mixers during servicing,
- The contractor should have a spill prevention response procedure including all the necessary equipment and workers trained on management,

7.2.3.8 Occupational Health and Safety Impacts

Potential impacts during construction include: exposure to physical hazards from the use of equipment's; trips and fall hazards; rock falls/slides at high elevations and exposure to dust and noise. The increased no of vehicles will pose safety risks to the public, other health and safety risks may result from workers operating equipment without adequate training, lack of scaffolding, and lack of PPE or extended exposure to outdoor weather resulting in heat related lethargy and Lack of safety experts on site. Safety (worker exposure, safety impacts) Hazards generally comparable to conventional drilling methods, with special provisions anticipated for high noise levels and site-specific contamination issues.

The Contractors have the greatest responsibility for the safety of the workers.

Mitigation Measures

- Ensure the work places are registered with Directorate of Occupational Health and Safety (DOHS)
- Provide clean and acceptable sanitation and water facilities
- Encourage tool box meeting on site
- The site should have a functional grievance redress mechanism that allow workers to raise safety issues on site
- Workers should be provided with suitable PPE and enforce use such as overall, safety boots, gloves, helmet, nose mask and ear plugs

- Scaffold used must be sound, rigid and sufficient to carry its own weight plus four times the maximum intended load without settling or displacement.
- Barricade the active work sites to limit entry of unauthorized people such as use of scaffoldings, use of screens and nets to avoid flying debris and ensure good housekeeping at the construction site;
- Trenches over 0.5m deep or wherever soil conditions dictate should be secured against accidental fall by workers and the public;
- Install information and safety signage along the work areas;
- Electrical works and installations should be done by a trained and certified experienced personnel,
- Ensure all vehicles, equipment and machine are inspected, repaired and maintained before use, and machine operators are trained on machine use and safety.
- A safety officer shall be designated at the construction site and shall maintain a log of incidents (safety register) on site and report on any fatalities related to the project within 24 Hrs.
- The contractors complies with provisions of WIBA, 2007 for all the workers engaged;
- Provision of first aid kit on site
- Train the construction workers on lifting and materials handling techniques in construction works
- Worksite monitoring and personal protective equipment (PPE) required, as appropriate, for mechanical, noise, and potential contaminant exposure hazards. Typically 3-5 people operate drilling equipment.
- Standard risks associated with the use of heavy equipment and hydraulics. Prevented by establishment of authorized/limited-access exclusion zones to be maintained during setup and drilling process.
- Risk levels typical of those associated with any mobile, truck-mounted heavy equipment. Encourage employees to concentrate on their duties to avoid occupational accidents. Employees should also be encouraged to avoid negligence while on duty.
- Plan work site layout to minimize the need for manual transfer of heavy loads
- Select tools and design work stations that reduce force requirements and holding times, and which promote improved postures, including, where applicable, user adjustable work stations
- Implement administrative controls into work processes, such as job rotations and rest or stretch breaks

To avoid Slips and falls the Contractor should put in place the following measures

- Implementing good house-keeping practices, such as the sorting and placing loose construction materials or demolition debris in established areas away from foot paths
- Cleaning up excessive waste debris and liquid spills regularly
- Locating electrical cords and ropes in common areas and marked corridors

7.2.3.9 Traffic Flow and Traffic Related Accidents

For all proposed construction sites, there is a likelihood of increased movement of vehicles to and from the project sites. This was one of the issues raised during the public participation meeting by the neighbors, residents and other stakeholders.

Vehicles moving in and around a workplace, reversing, loading and unloading are often linked with death and injuries to workers and members of the public.

Mitigation Measures

The contractors shall:

- Design the layout of the workplace to minimize interactions between pedestrians and vehicles.
- Careful planning and controlling vehicle operations and pedestrian movements at the workplace
- Develop in consultation with the proponent, a traffic management plan for the proposed project providing clear traffic map showing entrances and exit points for vehicles ferrying construction materials, segregating traffic safety, equipment operation and walking areas among other details to reduce on conflicts and possible injuries,
- Contractor shall emphasize safety aspects among project drivers, especially speed limits to the institution,
- Contractors should regularly inspect vehicles, safety and employed trained drivers to minimize potential traffic related accidents.

7.2.3.10 Excessive Noise and Vibration

Levels of noise and vibrations typical of construction works will be generated at the project sites during the construction phase. This noise impact is expected to be negative in the short- term. The major sources of noises and vibration will be construction equipment's, vehicles and workers. Elevated noise and vibration levels within the site are averse to the health and safety of the project workers, the residents, passers-by and students within the vicinity of the project site. The major receptors exposed to the noise are expected to be at a minimum and will include mainly the construction workers.

The drilling processes of the boreholes is likely to cause a lot of noise to the residents and institutions where the projects will be done.

Mitigation Measures

The following mitigation measures are recommended to control effects of noise and vibrations during construction phase. The contractor shall:

- Keep members of the public away from the drilling site during drilling.
- Warn the sensitive neighboring establishment 5 days before drilling commences.
- Maintain plant equipment to avoid annoying noises.
- Construction activities to be restricted to daytime.
- Workers in the vicinity of high-level noise to wear safety and protective gears.
- Conduct periodic noise measuring and monitoring to determine levels and extent of harmful noise;
- Deploy machineries that creates less vibration and noise
- Provide PPE (hearing protection) to persons operating within or visit identified high noise areas and machines.
- Inform local residents when construction activities are likely to generate excessive noise in order to minimize disruption to local residents;
- Sensitize truck drivers to switch off engines while offloading materials; to avoid gunning vehicle engines or hooting especially when passing through sensitive areas such as churches, schools, residential areas and hospitals.

7.2.3.11 Increased Energy Consumption

The project will consume fossil fuels (mainly diesel) to run transport vehicles and construction machinery. Fossil energy is non-renewable and its excessive use may have serious environmental implications on its availability, price and sustainability.

Mitigation Measures

The contractor shall:

- Ensure planning of transportation of materials to ensure that fossil fuels (diesel, petrol) are not consumed in excessive amounts
- Promote conservation of electricity used during the construction phase and operation phase – use energy saving bulbs for lighting,
- The facilities designs should maximize the use of natural ventilation and lighting to the extent possible.
- Liaise with proponent to apply a meter for use during construction to monitor on power consumption and keep records

7.2.3.13 Fire risks and hazards

Fires can start from ignitable materials, cigarette smoking in non-designated places or defective electrical connections. Without provisions for fire safety, there is a risk of fire outbreak at the institution with disastrous life and financial impact.

Mitigation Measures

a) Hire competent and properly authorised electrical contractor to do the wiring and other electrical works
b) Provide fire extinguishers during their construction work at strategic positions and ensure servicing is done and records kept,
c) Key construction workers staff shall have basic training in fire control,
d) Fire emergency telephone numbers should be displayed within construction areas
e) The contractor shall prepare a fire emergency management plan
f) Identify a designated fire assembly point

7.2.3.15 Community Health and Safety:

The Contractor has a responsibility to protect the local community from exposure to threats of health and safety. The schools, learners and community adjacent to the 43 proposed sites in 43 institutions are at risk of community health and safety impacts such as contaminantion, risk of HIV/AIDs, risk of covid and risk of increased food kiosks and vendors.

Contamination

Typically, groundwater is naturally clean and safe for consumption. Because the overlying soil acts as a filter, groundwater is usually free of disease-causing microorganisms. However, contamination may occur following improper installation of well casings or caps, after a break in the casing or as a result of contaminated surface water entering the well. Contamination can also occur if boreholes are drilled in fractured bedrock without an adequate layer of protective soil and with less than the recommended minimum casing length.

Mitigation measures:

- Sealing off of upper aquifer to avoid contamination caused by seepage from pit latrines and septic tanks.
- Construction of well head slab to avoid surface run-off in to the borehole.
- Ensure proper installation of borehole casing avoiding breakages.
- Testing Well Water for Microbiological Contamination

- New boreholes should be disinfected by the borehole driller at the time of construction to eliminate any microbiological contamination that may have occurred during drilling. This should be done before collecting a sample for microbiological testing. Existing boreholes should be tested two or three times a year. The best time to sample the borehole water is when the probability of contamination is greatest. This is likely to be after an extended dry spell, following heavy rains or after lengthy periods of non-use.

Borehole Maintenance

- Proper siting, location, construction and maintenance of the borehole will help to minimize the likelihood of contamination. The well cap should be checked regularly to ensure that it is securely in place and watertight. Joints, cracks and connections in the borehole casing should be sealed. Pumps and pipes should also be checked on a regular basis, and any changes in water quality should be investigated

- **Increased risks of Spread of HIV/AIDS**

The projects will attract new people to the project area and increase the amount of disposable cash of the construction workers. This may lead to several repercussions leading to the spread of HIV/AIDS and/or other sexually transmitted diseases (STDs). Influx of new people to the project area especially construction workers can affect the number of new cases of HIV, because they often interfere with an otherwise stable situation but the contrary can also happen where the newcomers find themselves at higher risk.

- **Increase in Sex work**

Construction workers could increase or create the demand for casual sex leading to the emergence or increase in sex work near the construction sites. Sex workers are a key bridging population for HIV transmission because their customers in many cases have spouses. The HIV prevalence among sex workers is usually higher than that of the general population due to the risky nature of their business.

Mitigation Measures

The contractor shall implement the following strategies:

- Hiring workers from the local community to reduce the risks associated with labor influx;
- Education and sensitization of workers and the local communities on HIV/AIDS and STIs
- Provision of condoms to the project team and the public, sensitization on importance HIV testing and adherence to use of ARVs
- The contractor has to institute HIV/AIDS awareness and prevention campaign amongst workers and the local communities for the duration of the contract e.g.,
- Display and maintain HIV/AIDS information posters at prominent locations as specified. The contractor has to ensure that staff are made aware of the risks of contracting or spreading sexually transmitted diseases
- Establish a partnership with local wellness centers including hospitals, VCT and ARV centers and NGOs near the project area for implementing an HIV/AIDS prevention and response program

7.2.3.14 Increase in Food kiosks

There is a likelihood of food kiosks starting to appear more so close to the project site due to meal demands from the workers. Most of the foods sold at such places are affordable to

construction workers. The food Kiosk owners will be looking for a way to earn a living through selling of prepared food. This could pose public health risks due to contaminated food, insecurity within the area and possible increase in spread of communicable diseases.

Mitigation Measures

- on-site kiosk services with adequate sanitation to be allowed within the project construction site
- The workers will have designated areas for eating and resting

Only licensed vendors by public health will be allowed to operate food kiosks near the project site

7.2.3.16 Exposure Risks to COVID-19

The construction activities bring an influx of people which may lead to overcrowding, workers sharing tools and safety gadgets which exposes them to COVID 19, workers not complying to COVID 19 measures like wearing masks at all time, sanitizing and this could put them risk.

Mitigation Measures

- Use of face mask by all staff on site
- Sanitization of all project vehicles and equipment.
- Contractor should provide appropriate sanitation facilities including hand washing facilities (soap/ water) at site entrances and exits. Maintenance of basic hand hygiene by regularly washing hands with soap.
- Taking of body temperature of all staff and any other personnel visiting the site. The temperature should not be above 38°C.
- Any individual with cough and have flue like symptoms of chest infections, illness such as fever, difficulty in breathing and sneezing with history of travel will be advised to go for assessment and prompt management.
- All working areas will always be kept clean and well ventilated.
- There will be provision of hand sanitizers in all offices and other entry points.
- Sensitization meetings to the employees-where the staff continue to receive and communicate to them, the latest updates, requirements, and educational information meant to prevent the spread of COVID-19
- Display posters and signs on notice boards and entry points on COVID 19 measures
    - Contractor to procure enough PPE/working gears to avoid sharing
    - Sensitize and encourage vaccination
    - Consider changes to work processes and timings to reduce or minimize contact between workers, this can be achieved through decreasing the size of work teams,
    - Adapting or redesigning work processes for specific work activities and tasks to enable social distancing, and training workers on these processes. Such as avoid congregation of more than 15 workers at one location. Where more than one person is gathered, maintain social distancing of at least 2 meters,
    - Ensure the MoH COVID-19 protocols are followed on site.

7.2.3.17 Labour Influx Related Impacts

Local residents, especially the youth usually benefit from expanded opportunities for seasonal employment during the construction period of projects in their areas. However, sometimes local labour force is not available, due to experience required and/or lack of people to be employed from the area. The contractor therefore usually brings labour force from outside, who are skilled and sometimes fulltime employees, which could result in potential social conflict

between the contractor and the local residents if local skilled and unskilled labour is not utilized during the construction period. This could lead to demonstrations, damage to property, stoppage of the works, and sometimes lead to violence towards the contractor and his employees.

The possibility of increased poor sanitation due to sharing of sanitation facilities with construction workers may arise especially during the initial stages of setting up. Sharing of sanitation facilities such as toilets with the institution students and other members of the Institution community could lead to hygiene challenges and a risk of hygiene related diseases.

Project workers such as construction workers face the risk of exploitation, discrimination and other forms of unfair treatment by employers/contractors, eg. being overworked with no compensation, low wages, improper provision of proper PPEs and equipment for the works assigned, among others. The potential labour disputes may also arise due to breach of contract regarding conditions of employment, fringe benefits, hours of work, and wages negotiated or of already agreed terms.

Proposed Mitigation
The contractors shall

- Prioritize the local skilled and unskilled labour within the project area during construction stages
- Provide adequate clean sanitation facilities for the workers both male and females at the ratio of 1:25 for men and 1:20 for women. Clean water should be always available to maintain hygiene
- Expressly instruct workers to use the designated facilities at the construction site and have minimal interactions with the institution fraternity if any needed laid out channels and reporting hierarchy should be used
- Ensure that all workers have contracts with terms and conditions that are consistent with national labour laws and polices
- Every worker should also sign a code of conduct (CoC) as an annex to the employment contract – covering issues such as zero tolerance of unacceptable conduct in the community, GBV, sexual harassment, sexual exploitation and abuse of children, etc
- Facilitate workers to form a committee through which their grievances will be received attended to or channelled to management
- Fair terms and conditions shall be applied for project workers (guided by relevant labour laws)
- The project shall respect the workers' right of labor unions and freedom of association
- Ensure overtime is recorded and compensated
- Keep proper and updated records of the laborers on site while avoiding child and forced labour
- Register workers as required by WIBA 2007

7.1.3.18 Child Labour Risks

The Programme infrastructure component being in institution of learning, there is a probability of certain behaviors emerging among construction workers which lead to unwanted cases of child abuse in the locality. The construction site is opening up the area to many people others coming to sell food some of whom are girls sent by their parents.

There is potential of the contractor employing trainees who have not reached the employment age, therefore violating the child labour laws of the borrower. The laws of Kenya prohibit contractors from "employing persons under 18 years of age.

Disruption of schooling, School children who live near construction sites are likely to be absent from school many times or will perpetually report late to school because of engaging in petty business activities of vending eats and other items to construction workers.

Mitigation Measures

The contractors' sociologists will ensure that:

- Workers will be educated by relevant agencies such as police and probation officers on the relevant laws and polices protecting children
- Reach out to children in and out of school in the vicinity of the construction sites with a life skills program focusing on HIV/AIDS and sexual abuse prevention among others areas
- Strengthen school based and school led life skills programs targeting any schools near construction sites
- Mobilise and strengthen child protection institutions and structures near construction sites
- Reach out to school authorities and parents near construction sites on paying special attention to child protection in light of labour influx
- Partnerships will be established with relevant government agencies and NGOs to ensure children access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary
- Ensure no children are employed on site in accordance with national labour laws
- Popularize /put in place confidential mechanisms for reporting child abuse cases
- Institutionalize zero tolerance to child exploitation and abuse and include a clause in contractors code of conduct deterring the sub-project from engaging in child labour.
- The contractor will develop and implement a Children Protection Strategy that will ensure minors are protected against negative impacts associated by the Project including on SEA.
- Wherever possible, ensure that another adult is present when working in the proximity of children.
- Ensure that recruitment inventory indicates the ages of employment applicants and age verification is done using the national identification cards
- Handle learners with dignity and use language appropriate to the child's age
- Ensure that the channels for channelling complaints related to children are displayed in the construction site e.g. the child helpline 116
- Enforce the child protection related clauses in the Code of conduct signed by all workers with physical presence on construction sites
- Ensure visibility of signage and information, education and communication materials on such child protection in construction sites

7.2.3.19 Gender Based Violence (GBV), Equity, Rape and Sexual Harassment

Due to labour influx for some project activities such as construction works, the project could exacerbate GBV, sexual harassment and other sexual offenses such as rape. Construction workers may engage in sexual fraternization with wives of other people. In addition to this being a driver of HIV infection, it will lead to domestic conflicts, GBV and domestic violence at household level. Women who seek employment may also face demands for sexual favours before being employed which amounts to sexual harassment. Even when employed, women may face continuous and unwanted demands for sex and risk losing their jobs if they do not give in. Women in the community and places of work may also face the risk being subjected

to verbal harassment in the form of insults and demeaning comments in addition to unwanted gestures and touches by construction workers. Sexual harassment of women and girls might also happen as a result of mixing of women and men at worksites and campsites. Outright rape is also a risk some female employees may face when employed at construction sites. As a result, domestic violence and gender-based violence in homes, where it might have an impact to children who are likely suffer physically and emotionally.

Gender Inequity in Employment

There is a potential risk that gender inequality might be perpetuated during project construction through unequal distribution of work, discrimination against women, and unequal pay for women, among others.

Sexual Exploitation and Abuse (SEA) of under-age girls

There is a potential risk of project workers engaging in illegal sexual relations with minor girls, leading to HIV infection, teenage pregnancy, early child marriage, illegal and risky abortions, school dropout, etc.

Proposed Mitigation

- Contractors and implementing agency to prepare and implement a Gender Action plan to include at minimum, in conformance with local laws and customs, equal opportunity for employment,
- All workers and nearby communities and stakeholders will be educated on preventing and responding to sexual harassment and GBV ahead of any project related works.
- The community within the vicinity of the college where construction will take place will also be educated on gender-based violence and sexual offenses such as sexual harassment, rape and defilement in the context of labor influx and the prevention and response measures.
- Educate all project workers on preventing and responding to Sexual Exploitation and Abuse prior to implementation of civil works sub-projects that may involve labor influx (whether from sub-project area, other sub-counties, counties, or other parts of the country or internationally).
- Establish partnerships with GBV service providers and schools, local administration with relevant government agencies and NGOs to ensure survivors of GBV and sexual offenses access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary
- Ensure that women are given adequate employment opportunities during recruitment and job postings
- Regular sensitization and awareness campaigns to the workers should be done to promote gender equity in employment during the construction works and during operation.
- Provision of gender disaggregated data, separate bathing, changing, sanitation facilities for men and women
- Impose zero tolerance on sexual harassment, all forms of gender-based violence and discrimination at all phases of the project
- Contractors to prepare and enforce a No Sexual Harassment Policy in accordance with national laws where applicable.
- Identify and map out all the GBV service providers (referral pathways) and provide support to ensure survivors access such services with ease.
- Ensure workers sign a Code of conduct prohibiting all forms of GBV.SEA-H

- Ensure visibility of signage and information, education and communication materials on such GBV issues in construction sites.

7.2.3.20 Impacts on Cultural Heritage / Archaeological Interest / Existing Ecologically Sensitive Areas

Construction activities e.g excavations during drilling of boreholes, trenches for classrooms is likely to interfere with some cultural heritage resources such as graves and existing ecologically sensitive areas that are within the 12 counties the project is being implemented.

Mitigation Measures

- The Projects should implement a chance find procedure and reporting system to be used by contractors in the event that a Cultural heritage feature or ecologically sensitive item/issue is encountered.
- Inform site supervisor/foremans.
- Install temporary site protection measures (warning tape and stakes, avoidance signs).
- Inform all personnel of the Chance Find if access to any part of the work area is restricted.
- Establish a localized no-go area needed to protect the Chance Find.
- Document find through photography, notes, GPS coordinates, and maps (collect spatial data) as appropriate.
- Prepare and retain archaeological monitoring records including all initial reports whether they are later confirmed or not. The record will include coordinates of all observations to be retained within the project's GIS system (*viz.* ArcGIS).
- Develop and implement treatment plans for confirmed finds using the services of qualified cultural heritage experts.
- If a Chance Find is a verified cultural heritage site, prepare a final Chance Finds report once treatment has been completed.

7.2.3.21 Increased Insecurity Concerns

Recruitment of workers during the construction phase may attract some characters of people who may take advantage of being in this place and some may engage in social evils and vices. There could be notable insecurity concerns between construction workers and institution workers. There may also be conflict between the contractor and the surrounding communities due to: health and safety risks, labour recruitment, shared resources (road, etc.) and behaviour of workers. Workers coming to project site under the influence of drugs could cause insecurity concerns and interruptions of the construction works

Proposed Mitigation Measures

- The contractors should explore on the possibilities of having a different access to be able to enhance security and differentiate between visitors and workers accessing the site.
- The contractors, in conjunction with the management, should hire more security personnel and ensure they are well inducted to address security related issues as they arise.
- Contractors to liaise with institutions and local leadership when recruiting local workers
- Provide sanitation facilities including toilets and water to the workers to prevent

complaints emanating from community shared water point.

- Contractors' security personnel and all workers should sign the Code of Conduct that discourages the use of force unless for defensive purposes
- Discourage any form of bad behavior and ensure discipline is maintained during the construction hours.

7.2.3.21 Alcohol and Drug Abuse

The presence of migrant construction and other project workers in the community may lead to the emergence of small business hubs with kiosks for selling foodstuffs, cigarettes, alcohol, etc to serve the workers and other members of the community. These business hubs may also engage in selling illegal drugs to project workers and other members of the community. The overall effect may be an increase in consumption of alcohol and illegal drugs in the community.

Proposed Mitigation Measures

a) During workers' orientation, they should be clearly informed of no drug or alcohol abuse within the construction site and during working hours

b) The supervisor should not allow any worker entry to the construction site who is under the influence of drugs or alcohol.

c) Contractor to establish a designated smoking zone

d) Provide posters sensitizing workers on the dangers of alcohol abuse

7.2.3.22 Grievance Arising from Construction Activities

There is likely hood of grievances and dissatisfaction during construction phase of the project that could lead to riots that eventually lead to project disruptions

Proposed Mitigation Measures

The following measures should be undertaken to manage complaints arising from the project construction activities.

- Put in place grievance redress mechanisms e.g.,
    - Assigning a contractor based GRM Focal Person
    - Putting in place channels to allow people complaint- e.g., Telephone, Email, registers, What's up platform for workers, suggestion box among others
    - Ensuring documentation of complaints- Complaints registers
- Raise awareness to all stakeholders including project workers on the existing GRM and sensitizing them on the need to register their dissatisfaction with the contractor
- Resolve complaints within the project time-line (acknowledging within 7 days and resolving within 21 days or as soon as possible (within 24 hours for GBV/SEA complaints)
- Ensue complaints reporting to the PMT on a monthly basis

7.3 OPERATIONAL PHASE

Some of the impacts both positive and negative that may be as a result of the proposed programme during the operation stage will include:

7.3.1 Positive Impacts

It is anticipated that the operations phase of this project will result in the following positive impacts:

- Provision of better learning facilities for learners and communities in the NACONEK manadated areas
- Employment opportunities for various cadres within the institution
- Optimal use of land
- Increased enrollment in learning institution
- Increased business opportunities for goods and service providers
- Learning opportunities for students
- Reduction of gender gap in enrollment and completion rates - Women (and girls) to benefit from affirmative action during admission to reduce the enrollment gap and an enabling learning environment including provision of accommodation for women to be enhanced

7.3.2 Negative Impacts

The potential impacts likely to occur during the operations and maintenance phase of the project include:

7.3.2.1 Increased Water Demand

Underground water depletion

Ground-water depletion is primarily caused by unsustainable ground-water pumping. Some of the negative effects of ground-water depletion include increased pumping costs, deterioration quality, reduction of water in streams and lakes, or land subsidence. Such effects, while variable, happen to some degree with any ground-water use. Ground water can be recharged (deposited) by infiltration from precipitation, surface water, or applied irrigation water; it can be kept in storage (saved); and it can be discharged naturally to streams, springs, or seeps, or transpired by plants.

Mitigation Measures:

- Proper monitoring of number of boreholes being authorized by the Water Resources Management Authority within the proposed area.
- The project proponent should not exceed the water usage limit per day.
- Alternate water usage with rain water when available.
- Encourage rain water harvesting and use that water for non-domestic uses like cleaning floors and watering flowers. Store the rain water in tanks for future use.
- Monitor and meter the water system to determine the largest water consumption areas; monitoring also can help detect leaks in water systems
- Community service participation like tree planting
- regulate abstraction from boreholes;
- obtainment of abstraction permits, EIA licensing of boreholes

Reduced surface-water flows

There's potential for overabstraction from boreholes causing others to dry up; potential for conflicts around water use; potential for environmental degradation around water points In most areas, the surface- and ground-water systems are intimately linked. Ground-water pumping can alter how water moves between an aquifer and a stream, lake, or wetland by either intercepting ground-water flow that discharges into the surface-water body under natural conditions, or by increasing the rate of water movement from the surface-water body into an

aquifer. In either case, the net result is a reduction of flow to surface water, though the full effect may take many years to develop.

Mitigation measure:
Proper management and conservation of the catchment zones through tree planting.

An increase in water demand is expected from the proposed institutions once complete from the various sections such as the administration, hostel, workshops, laboratories. The demand is expected from the restaurant, washrooms, showers in the hostels, laboratory, landscaping, housekeeping among others.

Mitigation

- Encourage reuse and/or recycling of water during operational phase
- Roof catchments of building blocks provided with rain water harvesting systems (gutters, downpipes, and water storage facilities) to enhance collection and storage of the resulting run-off. Such water may be used in water flowering gardens and general cleaning.

7.3.2.2 Increased Solid Waste Generation

The quantities of solid waste to be generated by the users of the offices and other facilities provided within the institutions are expected to be significant. Such waste will include foodstuffs, empty plastic containers, cartons, waste papers, plastic bags, etc.

Mitigation Measures

- Purchase dustbins and strategically place within the building
- Encourage solid waste segregation through marking the dustbins for organic and inorganic solid waste for purpose of separation
- Contract a NEMA licensed waste collector for regular collection and disposal at County approved sites
- Clean storm water drains to minimize clogging/blockages,
- The proponent/Learning institutions to reduce, recycle, reuse strategies.

7.3.2.3 Increased Surface Run-off and Storm Water Generation

After the construction activities there will be significant amount of surface run-off from the roof catchment and other impermeable areas during the operational phase.

Mitigation Measures

- Rain water harvesting gutters and storage tanks should be installed to reduce the amount of rainfall reaching the surface
- Hard surfaces should be well reticulated with the surface drainage system
- After completion of construction, the proponent/institution should embark on comprehensive landscaping of open areas

Community Health and Safety concerns

During the operation phase the structures buld are likely to attract community health concerns due the maintenance and protection of the structures, if the toilets are not

well mmaintained by cleabning and observing proper hygiene, there is likely hood of spread of diseases

If the boreholes are not well protected and are within the institutions there is likelihood of spread of diseses.

Mitigation Measures

- Ensure proper cleaniliness is done on sanitation facilities in school
- The boreholes are well protected and covered all the times

7.3.2.5 Occupational Health and Safety Concerns

Issues of occupational health and safety hazards during the operation and maintenance phases shall result from various sources such as the construction of classrooms, micro irrigation channels, construction of boreholes and have adverse effects if not controlled within recommended limits.

Mitigation Measures

- Control over area generating dust particles through regular cleaning or sprinkling of water to reduce dust
- Provide personal protective equipment (PPE) to the workers operating within the learning institutions.

7.3.2.7 Exposure to COVID-19 Within the Institution

Due to the development of the new infrastructure within the institution, this is going to increase the current population and could pose threat of exposure to COVID 19 among workers, staffs and students.

Proposed Mitigation Measures:

- Observation of the recommended 1.5m social distancing
- Use of face masks by all workers at site
- Sanitization of all project vehicles and equipment.
- Maintenance of basic hand hygiene by regularly washing hands with soap.
- Taking of body temperature of all workers and any other personnel visiting the site. The temperature should not be above 38°C.
- Any individual with cough and have flu like symptoms of chest infections, illness such as fever, difficulty in breathing and sneezing with history of travel will be advised to go for assessment and prompt management.
- All working areas will always be kept clean and well ventilated.
- There will be provision of hand sanitizers in all offices and other entry points.
- Sensitize staffs and trainees on signs and symptoms on COVID 19
- Place signs and posters to create awareness to project workers on COVID-19;
- Regularly assess work force characteristics and adjust work practices such as avoiding concentration of more than 15 workers per site when more than one person is gathered maintain social distance of at least 2 meters;
- Sensitize and encourage vaccinations

7.3.2.8 GBV/SEA -H within the Operations of the learning institutions

The operations at the institutions could lead to exposure of gender inequalities, sexual harassment, sexual favors and discrimination.

Proposed Mitigation Measures

- Zero tolerance to GBV/SEA
- Enforce the existing policies related to GBV/SEAin the NACONEK mandated learning institutions
- Continuous sensitization of staff on GBV/SEA-H risk management
- Provision of GRM channels for reporting SEA cases
- Ensuring that the GBV/SEA one pager is placed on strategic points of the institution
- Document available GBV/SEA referral pathways for victims' information and support
- Develop an Action plan of all GBV/SEA incidences to avoid recurrence.
- Ensure the facility is well lit to avoid hiding places for SEA perpetrators.
- Provision of separate sanitation facilities, changing rooms for men and women with signages well displayed
- To include prohibition of GBV/SEA in Employees Code of conduct e.g. discouraging the use of inappropriate language or behavior, harassing, abusive, sexually provocative, demeaning or culturally inappropriate language towards each other
- Prohibiting sexual activity with persons under 18 years including through digital media and promoting respect to the rule of law in respect to children's rights.

7.3.2.10 Increased Grievances

During operations, there is likelihood that different forms of grievance like students not being handled professionally, discrimination due to the status by staff, sexual favors, negligence in provision of services and materials might be raised.

Proposed Mitigations

- The institution should create awareness about the GRM mechanism in place to all staffs and trainees.
- Provide affected people with avenues for making complains or resolving any dispute that may arise during the course of stay or working at the institutions-displaying in visible places within the facility
- Ensure appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants
- Provide for a mechanism where people can lodge complaints securely and confidentially-especially regarding GBV/SEA and worker's complaints
- Ensuring that there is a workable mechanism of opening complaints reported through suggestion boxes, help desk and designated person and referral to relevant authorities.
- Develop and implement student/staff satisfaction feedback tools.

7.4 DECOMMISSIONING PHASE

Decommissioning is an important phase in the project cycle and comes as the last to wind up the operations/activities of a particular project. The main purpose of decommissioning is to restore/rehabilitate the site to acceptable standards.

Quality and standard buildings of the proposed nature have a lifespan of between 50 and 100 years which is much dependent on the maintenance quality. This is long period of time and there may be many changes which may not be foreseeable including the technological and legal aspects. The decommissioning may also come earlier than the lifespan of the buildings again due to various reasons like change in physical planning policy or the discovery/realization of a more optimal use of the land. It is therefore recommended that an ESIA be conducted when

the time for decommissioning comes so that all aspects will be looked at against the prevailing conditions and requirements. However, the purpose of decommissioning is mainly to rehabilitate the project site to an acceptable standard and all efforts should be geared to making the site as close as possible to its original state before the project was implemented.

The decommissioning will in brief involve demolitions of the structures, removal of debris and landscaping. The other social implications involve the laying off workers who may be employed thus will lose their income, issues of safety and health etc. due to the fact that nobody knows the future.
Some of the anticipated impacts during the decommissioning phase of the proposed project include;

7.4.1 Positive Impacts

The potential positive impacts during the decommissioning phase include:

- Rehabilitation and restoration of the site to its original status
- Employment opportunities
- Recycling and reuse of materials such as metals, timber, doors and stones among others

7.4.2 Negative Impacts

The following are the potential negative impacts:

7.4.2.1 Noise Pollution

Activities likely to produce noise during decommissioning include demolition of structures, machine operations.

Mitigation Measures:

- Schedule noisy activities during the day time period
- Use silencers on machines where possible
- Provide hearing protective devices such as ear plugs and ear muffs particularly where noise levels exceed 85-90 dBA
- Notify public of demolition activities perceived as noisy and intrusive prior to starting demolitions

7.4.2.2 Air/Dust Pollution

This is expected to result from excavation/demolition activities at the site.

Mitigation Measures

- Active earth works, stock piles and loads of soil being transported must be watered to reduce dust
- Diesel exhaust emissions from heavy machinery on site be controlled and minimized by regular checks and servicing of vehicles

7.4.2.3 Generation of Debris

It is expected that large amounts of solid waste material arising. During decommissioning of the facilities potential solid waste may range from: Demolition waste; metal cuttings, stone rubbles,

sharp objects from broken glass, timber among others. The proper disposal of these materials is critical.

Mitigation Measures

- Use an integrated solid waste management system I.e. through hierarchy of options 1. Source reduction 2. Recycling, 3 Composting and reuse 4. Combustion. 5 Sanitary land-filling
- Ensure proper waste collection, storage and disposal of waste generated
- Donate reusable demolition waste to charitable organizations, individuals and institutions
- All rubble must be removed from site to an approved disposal site as approved by the Engineer. Burying rubble on site is prohibited

7.4.2.4 Occupational Health and Safety Hazards

Occupational Health and Safety hazards such as falling objects, open pits, sharp objects lying around, and indoor cement dust may all be a health risk to construction workers. Risk of accidents and incidents will be heightened during the decommissioning activities as the workers will be in direct contact with heavy machinery and equipment.

Mitigation measures

- The decommissioning workers will be provided with appropriate PPE and the contractor will enforce their use
- Develop safe work procedures for demolition works
- Hoard/ barricade the site to restrict public access

7.4.2.5 Social Risk Management

The decommissioning activities need to be handled within the ambit of social risks that are likely to occur such as grievances, conflicts, influx of labour related risks among others.

Mitigation Measures:

- Ensure there is an operational GRM that is responsive to stakeholders' concerns
- Inclusive stakeholder engagement to raise awareness of the project decommissioning and clarify issues and consider the input of the affected and interested parties in the process
- The institutions should continue to create awareness about the GRM mechanism in place to all workers and patients
- Ensure appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants
- Ensuring that there is a workable mechanism of opening complaints reported through suggestion boxes
- Document and report on all sub-project related grievances

Table 7.4 *Climate Risk and Vulnerability Assessment*

		Climate Hazard	Exposure Level
Activity type	Sub-activity		
Water	Solarized Borehole and Water kiosk	**Describe** Serious drought lowering water table **Level:** *Low risk, Low Potential Impact*	**Describe** Heat from solar radiation affecting water table. Most water infrastructure would be

			highly exposed to drought and flooding conditions in the ASALs **Level:** *Slightly Exposed*
	Truncated Water Pond	**Describe** • High temperatures causing high evaporation **Level:** *Moderate risk, Moderate Potential Impact*	**Describe** Heat from solar radiation affecting pond water level. Most water infrastructure would be highly exposed to drought and flooding conditions in the ASALs **Level:** *Moderate Exposed*
	Roof Rainwater harvesting into Sausage tanks	**Describe** • Low precipitation undermining optimization of water harvesting • Weather elements destroying structures **Level:** *Low risk, Low Potential Impact*	**Describe** • Extreme weather elements affecting amount of water harvested **Level:** *Slightly Exposed*
Micro Farming	Planting of Trees, Fodder and food crops with the use of organic inputs and fertilizer.	**Describe** • Extreme weather (rainfall, temperatures, wind) could cause flooding / drought and affect productivity **Level:** *Moderate risk, Moderate Potential Impact*	**Describe** • Extreme weather elements affecting farm productivity **Level:** *Moderately Exposed*
Energy	Energy Saving jiko	**Describe** • No direct link between climate and the activity **Level:** *No risk, No Potential Impact*	**Describe** • No direct link between climate and the activity **Level:** *Not Exposed*
	Steam cooking jiko	**Describe** • No direct link between climate and the activity **Level:** *No risk, No Potential Impact*	**Describe** • No direct link between climate and the activity **Level:** *Not Exposed*
Rehabilitation of classrooms	Fencing and repair of floors, walls & roofs of classrooms, toilets and kitchens.	**Describe** • Extreme weather elements (rainfall, wind, temperatures) destroying school infrastructure **Level:** *Moderate risk, Moderate Potential Impact*	**Describe** • Strong winds blowing off rooms, floods destroying buildings and fences. **Level:** *Moderately Exposed*
Micro-Hub	Offline learning center	**Describe** • Extreme weather elements (rainfall, wind, temperatures) destroying school infrastructure **Level:** *High risk, High Potential Impact*	**Describe** • Strong winds blowing off rooms, floods destroying buildings and fences. **Level:** *Highly Exposed*
New Construction	New Classrooms	**Describe** • Extreme weather elements (rainfall, wind, temperatures) destroying classrooms **Level:** *Moderate risk, Moderate Potential Impact*	**Describe** • Strong winds blowing off roofs of classrooms, floods destroying buildings. **Level:** *Moderately Exposed*
	New toilet Blocks	**Describe** • Extreme weather elements (rainfall, wind, temperatures) destroying toilets **Level:** *Moderate risk, Moderate Potential Impact*	**Describe** • Strong winds blowing off roofs, floods destroying toilets. **Level:** *Moderately Exposed*
	Girl Hostels	**Describe**	**Describe**

		• Extreme weather elements (rainfall, wind, temperatures) destroying hostels **Level:** *Moderate risk, Moderate Potential Impact*	• Strong winds blowing off roofs of hostels, floods destroying hostels. **Level:** *Moderately Exposed*

A Contractors Environment Social Management plan (C-ESMP) will be prepared for each Programme activity and site with complete climate risk and vulnerability assessment before programme activities commencement including climate risk and vulnerability assessment. However, a programme screening for climate risks carried out during the Programme ESIA is indicating moderate vulnerability to the impacts of climate change.

7.5.1 Climate risks and impacts

The main climate risk impacts include

a) higher temperatures,
b) frequent and prolonged droughts,
c) erratic rainfall patterns,
d) crop pests and diseases,

They largely affect availability of water resources and food and pasture production, which are key sources of livelihood for communities in the project areas.

7.5.2 Mitigation Measures to Climate risk in NACONEK infrastructure Programmes

The project has however incorporated measures to increase the resilience and adaptive capacity of target beneficiaries to these climate change impacts such as the

a) establishment of climate resilient water infrastructure for school,
b) crop and livestock production,
c) promotion of climate smart agriculture practices including agro-forestry,
d) promotion of use of clean cooking solutions such as briquettes,
e) training on alternative sources of livelihood such as beekeeping, poultry, goats and soap making training on climate responsive and green entrepreneurship opportunities such as waste management and recycling, briquette manufacturing, renewable energy solutions, climate smart agriculture and agribusiness skills.
f) planting of Glirisidia Sepium trees as part of agro-forestry and pastureland management activities will contribute to the reduction of greenhouse gas (GHG) emissions, estimates.

Through these interventions, it is expected that household income, food and water supply will increase, thus reducing the extent of migration and poverty levels in general will reduce due to increased yield and alternative sources of income.

CHAPTER EIGHT

8.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING PLAN

NACONEK the implementing agency has developed this project ESIA/ESMP to guide in the implementation of the proposed programme infrastructure activities in the 12 counties. The main objective of the project ESMP is to guide the contractor in the development of the contractor ESMP (C-ESMP) and the PMT on E&S monitoring and reporting to mitigate on any potential E&S risks during the different project phases. It is imperative that this ESMP will forms part of contractors' bidding documents so that they can allocate resources required for implementing the proposed mitigation measures.

The proponent acknowledges the fact that the proposed programme and sub-projects infrastructure activities will have some impacts on the biophysical environment, health and safety of its employees, workers, the wider public as well as the local community. Thus, the focus will be on minimizing/mitigating the negative impacts and enhancing the positive impacts associated with the project activities through a program of continual improvements. Environmental and Social Management Plans (ESMPs) are important tools developed to assist in guiding the proponent/contractor in mitigating of potential environmental, social, health and safety risks and impacts of the proposed project. It is worth noting that key factors and processes may change through the life of the project and considerable provisions have been made for dynamism and flexibility of the ESMP. A number of activities will be carried out during the various phases of the proposed project to ensure adequate E&S impact management. These include, but are not limited, to the following.

8.1 Environmental and Social Management Plan

8.1.1 Project Preparation Phase

i. Training of the relevant project staff in E&S management;
ii. Review and appreciation of project design details;
iii. Inclusion of environmental, Social, health and safety specifications in Tender Documents, and development of CoC for the Contractor

8.1.2 Construction Phase

i. Preparation of a Contractors Environmental and Social Management plan (C-ESMP) for use during project construction phase which should be reviewed and approved prior to start of any construction works
ii. Implementation of mitigation measures, through development of contractors' E&S Management Plan (C-ESMP) that shall include the following: OSH Plan, HIV/ AIDS Management Plan, Waste Management Plan, Emergency Response Plan, COVID-19 site management plan, workers Grievance Redress Mechanism, among others.
iii. Enforcement of environmental and OHS requirements (conditions at the Contractor's Yard, materials storage, condition of equipment, use of PPE, etc.);
iv. Disposal of construction solid, liquid and sanitary wastes in an acceptable manner and in conformance with regulations;
v. Ensuring that the Contractor is following the Code of Conduct and environmental health and safety specifications as provided in the ESMP and the C-ESMP;
vi. Training the Contractor's workforce in environmental and social awareness and responsibility (including on occupational health and safety, environmental management, COVID-19 prevention at construction sites, STD/HIV/AIDS awareness, GBV and SEA); and

vii. Liaison with local administration and community leaders in matters of disturbance to the public, security issues, and other matters arising from the project; and
viii. Undertake monitoring to ensure that requisite contractor/facility systems are in place to mitigate against inherent environment and social risks (GBV/SEA, Insecurity, child labour influx, child labour, grievance relating to the project).

8.1.3 Operation Phase

i. Disposal of solid and sanitary wastes in an acceptable manner and in conformance with the regulations
ii. Compliance with OHS manual to be prepared by project proponent/ Institution management during the project operational phase
iii. Environmental performance reporting based on evaluation of data collected
iv. Monitoring the implementation of the ESMP including monitoring to ensure that requisite systems are in place to mitigate against inherent social risks (GBV/SEA, Insecurity, child labour influx, child labour, grievance relating to the sub-project).and environmental risks such as pollution (air, noise, water), increased waste generation and surface run-off etc

8.1.4 Decommissioning

Decommissioning is an important phase in the project cycle and comes last to winding up the operational activities of a particular project. It refers to the final disposal of the project and associated materials at the end of the project lifespan. During this phase the proponent will be required to prepare a decommissioning management plan that will guide the decommissioning process and seek approvals/ permits from all the relevant government agencies such as NEMA, DOSHS, MoE, among others.

8.2 Environmental and Social Monitoring

The primary role of monitoring and supervision of project environmental and social compliance will fall squarely on NACONEK. A project monitoring team will however be set up and key players in the monitoring of compliance in the project will comprise:

1. NACONEK project management unit
2. County staff which include
    - County Director for Environment
    - County Director for Physical Planning
    - Labour Officer
    - Gender Officer
    - Community Development Officer
    - Physical Planner
    - Public Health Inspector
    - Occupational Safety and Health Officer
3. External Supervision and Support Implementation

- National Environment Management Authority
- African Development Bank (AfDB)

8.3 Key Monitoring Areas

Key monitoring indicators proposed include:

- Vegetation loss and remedial restoration measures instituted;
- Noise pollution control measures in place and how they operate;

- Soil disturbance control measures
- Traffic Management
- OHS measures for contractor workers and the institutional staff
- Community health and safety
- Public health observance
- Waste management measures
- Employment opportunities
- HIV/AIDS interventions and related sexual behaviours among workers, and
- Labour recruitment by gender and age
- GRM including number of complaints received and resolved within the project time-line
- Number of staffs inducted on safeguards requirements and those who have signed the CoC
- Security incidences and systems
- GBV/SEA prevalence reported in the institution

8.4 Environmental and Social Monitoring

The Table 11 below describes the roles and responsibilities of the stakeholders on ESMP implementation. Table describes how each of the main mitigation measures proposed should be implemented, the frequency, and the responsible party during the construction and operation phases. The responsibility of supervision of the implementation of all the proposed mitigation measures during construction and the defects liability period will lie with the proponent while the Contractor will be responsible for day-to-day operational matters of construction. After the defect's liability period, responsibility for the operation and maintenance of the facility will rest with the NACONEK. The table also presents an estimate of the costs of implementing the proposed environmental and social management and monitoring plan for the entire project cycle.

Table 8.1: *Roles and Responsibilities on ESMP Implementation*

Entity	Roles and Responsibilities
NACONEK project management Team including the E&S safeguard specialists	➢ Ensure the project is screened including coordinating the impact assessment and audit ➢ Support in preparation of the E & S instruments, review of the instruments and ensure they are cleared by African Development Bank and disclosed prior to implementation of the project ➢ Ensure the environmental and social requirements are prescribed in contractors bidding documents ➢ Periodic monitoring and surveillance of all project's investment to ensure compliance with the mitigation measures as set out in the ESMMP and other contractual requirements ➢ Required to provide monthly, quarterly environmental & social status of the project progress to feed into the overall project progress reports Advice on implementation of corrective actions wherever necessary ➢ Develop and fully implement including the necessary resources, all operational phase EHS plans ➢ Report immediately to the African Development Bank upon occurrence of any significant environmental, social, or health and safety incidents
12 County government Offices	➢ Supervise the Contractor and monitor works at all sites in particular ➢ Provide specific technical advice on mitigation measures for construction and operational activities related to the project ➢ Supervise the implementation of the approved project design ➢ Supervise project's implementation for construction progress with regard to time-lines and quality
Contractor's Community Liaison Officer/ Sociologist.	➢ Develop the Contractor ESMP focusing on social Issues with reference to the relevant documents i.e., client ESMP, NEMA certificate and any contractual conditions ➢ Display and educate the workers on the workers' Code of Conduct (CoC) ➢ Liaise with the HIV/AIDs service provider, undertake HIV/AIDs sensitization and Organize-Setting up special clinic days for the workers and the community adjacent to the site ➢ Create awareness on importance of child protection and GBV in relation to the project; and as appropriate organize counselling sessions for any victims, workers and the adjacent community ➢ Develop a Social, Gender and HIV/AIDs/ Child protection Checklist, CoC, report regularly on progress ➢ Establish a community grievance handling committee; create awareness on mechanism/committee/process ➢ Manage the complaints log and act as a secretary to the Grievance Committee ➢ Manage the environmental and social impacts and implement mitigation measures as stipulated in the ESMP
Contractor's HSE personnel	➢ Develop the Contractor ESMP based on the proponent ESMP, NEMA certificate and any contractual conditions ➢ Develop traffic management plan ➢ Ensure safe storage of the materials on site ➢ Prepare a waste management Plan for the site and ensure its implementation ➢ Prepare safety management plan for the site and ensure safety on site ➢ Ensure staff regular orientation on environment management and safety drills ➢ Display of the ESMP and Safety information

Entity	Roles and Responsibilities
	➢ Ensure availability and access of drinking water at the work site by all workers ➢ Develop an Environment, Health and Safety Checklist, and report regularly on progress ➢ Take responsibility for mitigation and management of potential environmental and social issues on site ➢ Organize and maintain briefing session records and mitigation and monitoring documentation on all matters of HSE ➢ Respond to site inspection findings through implementation of corrective action plans ➢ Receive and respond to any complaints from external parties on project issues on HSE ➢ Institute management of accidents (if they occur), keep a log book/ sheet ➢ Follow up on the health insurance requirements including compensation related to accidents (in case of any occurrence) ➢ Provide information to NACONEK mandated institutions related to HSE performance, and immediately report any significant environmental incident or worker accident
Consulting team	➢ Supervision and manage all the sites with regard to the administration of the Construction Contracts including E&S management compliance ➢ Review and approve contractor ESMP and other plans ➢ Ensure the contractors obtains all the required permits ➢ Ensure contractors compliance with the ESMP etc. and other laws and regulations ➢ Responsible for ensuring that, all the proposed construction activities at the 43 institutions and its associated facilities is constructed in accordance with the approved designs and contract documents ➢ Responsible for approvals of the construction materials to be used in the project ➢ Undertake supervision and monitoring of environmental and social issues and report to NACONEK ➢ Clear contractors' compliance with managing environment and social risks ➢ Provide information to NACONEK related to HSE performance, and immediately report any significant environmental incident or worker accident
12 County National Environment Management Authority (NEMA)	➢ Issuance of the EIA Certificate and supervise and co-ordinate all matters relating to the environment and to be principal instrument of government in the implementation of policies relating to the environment. ➢ Carry out site inspection to ensure compliance with the EIA conditions of approval

Table 8.2: *Environmental and Social Risks and Mitigation Measures during the Project Phases*

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
Planning and design phase				
Designs for the construction of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**	Risks of poor siting of the facilities or non-adherence to MOE guidelines, Improper designs that allows destruction and disturbance of vegetation and soils.	▪ Liaising with the relevant Technical Government department in development of the designs ▪ Proper siting of the programme infrastructure ensuring harmony with the institution layout and planning ▪ Ensure all the legally required permits are obtained prior to undertaking the construction activities ▪ The contractor bidding documents should contain clauses on Environmental Social Health and Safety (ESHS) requirements to guide the contractor on the key requirements	County Government, NACONEK, Leaning instituions	NA Already factored in pre-constructio n stages
Construction Phase				
Vegetation loss During the construction of	The site clearance of vegetation	▪ The contractor will ensure proper demarcation of the project area to be affected by the construction works to limit vegetation removal to project site	County Government, NEMA, NACONEK PMU	1,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
a. Micro irrigation schemes **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**		▪ Strict control of construction vehicles to ensure that they operate only within the area to be disturbed and designated access routes ▪ Ensure retention of grass and mature trees close to the site to the extent possible • Re-vegetate the area in the disturbed sections and surrounding environment after completion of works	NACONEK E&S Experts, Respective learning institution Contractors	
Interference with the physical setting **During construction of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing**	Site clearance and excavation works that will interfere with physical setting	• The contractor should ensure that there is minimal disturbance to the topography of the area • The project designs should be such that they do not interfere with local drainage or change the topography or introduce physical changes that are not in harmony with the physical setting of the project area • Restoration shall be undertaken to ensure that the original setting is as	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
f. Construction of Micro hubs **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**	Risks related to sourcing of construction materials	much as possible retained • The proponent should observe measures stipulated in the ESMP for sustainable project implementation • Contractor is advised to use the locally sources construction material and avoid opening of new material sites to the extent possible. Source construction materials from local suppliers who use environmentally friendly processes in their operations		
Solid wastes generation During construction of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks**	Environmental pollution from poor management of construction related solid wastes	▪ Contractor shall prepare a waste management plan to be implemented at the site (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before commencement of any works, which should promote waste minimization and recycling ▪ Contractor shall be responsible for handling and disposal of all construction and related waste ▪ Encourage efficient use of materials to as much as possible avoid and minimize waste production ▪ Ensure waste are recycled / reused before opting to dispose of. ▪ Designate temporal waste / garbage holding areas at site ▪ Engage NEMA registered waste contractor to dispose of hazardous waste	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
k. solarised water boreholes and water kiosks **l. Truncated ponds**		and have waste destruction certificate and waste transfer notes. ▪ Waste disposal by burning shall not be permitted and signage should be erected		
Liquid Waste Generation During construction of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**	Ground and surface water pollution Improve management of construction related liquid wastes	▪ Existing water ways, springs and wetland within and outside the construction zone should be preserved, ▪ Sanitation facilities should be sited away from the spring ▪ Maintain the drainage course flows during excavations ▪ Ensure storm water run-off from construction site is channelled through sieve traps/rocks, hay traps to remove organic pollutants ▪ Install silt traps at the onset of the construction at strategic places ▪ The sanitation facilities provided by the contractor should be connected to the existing sewer system or, ▪ Provide workers with appropriate clean sanitary facility which can be in the form of exhaustible mobile toilets by a registered NEMA waste water handler ▪ A specific area for washing of cement trucks and equipment should be identified and should not	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		be near water bodies such as the spring ▪ All equipment must be fuelled at designated fuelling stations ▪ Lubricants and oil from the construction machinery/equipment would be contained and properly disposed by licensed hazardous waste handlers		
Increased Water Demand During construction of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**	Increased water demand for mixing materials, wetting surfaces or cleaning/	▪ The contractor, should ensure that water is used efficiently at the site by sensitizing construction staff to avoid irresponsible water use ▪ Install a discharge meter at water outlets to determine and monitor total water usage and enable the contractor to pay for the wastes generated	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
Air pollution **During construction of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**	Dust and gaseous emissions are likely to be emitted during excavation and construction activities	▪ Minimizing the number of motorized vehicles on use and limit vehicle speeds to a maximum of 10Km/Hr ▪ Make use of predetermined routes when bringing in construction material or in transportation of solid waste generated ▪ Periodically service all the equipment and machinery and ensure in good working condition to minimize emissions; ▪ Wet all active construction areas when necessary to reduce dust ▪ Cover the stock piled construction materials and spoil generated from the excavations ▪ Provide appropriate PPE (dust mask) to workers and enforce on use ▪ When transporting construction material, ensure vehicles are covered with tarpaulins in order to minimize on dust emissions ▪ Burning of solid waste material shouldn't be permitted at project site	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000
Accidental spills and leakages **During for the construction of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos**	Fuel lubricants, oil and grease, paints and pest control substances may have immediate impact on local water resources	▪ All machinery must be keenly observed not to leak oils on the ground. Maintenance must be carried out in a designated area (protected service bays more suitably outside) and where oils are completely restrained from reaching the ground ▪ All oil products and materials should be	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution	2,155

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Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
d. Wall painting **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**		stored in site stores of contractor's yard and should be handled appropriately to avoid spills and leaks ▪ Safety procedures for fuel storage and re-fuelling should be well understood and implemented by site staff; and oil residuals including waste oil, lubricants, used filters, should be carefully collected and stored for safe disposal, in order to prevent spillover effects of contaminant hydrocarbons into storm water or groundwater resources ▪ Contractor will use drip trays to collect waste oil and lubricants from stationary plant such as generators or concrete mixers during servicing ▪ The contractor should have a spill prevention response procedure including all the necessary equipment and workers trained on management	Contractors	
Occupation/Public Health and Safety Impacts During construction of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting**	Occupation/Public Health and Safety Impacts	▪ Contractor is expected to comply with OSH rules and regulations as stipulated in the OSHA, 2007. Ensure the work place is registered by the DOSHS ▪ The contractor shall prepare an OSH plan for the construction works management on potential health and safety risks associated with the construction activities ▪ All construction workers should be	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	2,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
e. Fencing **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**		sensitized on the health and safety requirements while at the project sites and risks associated with construction work ▪ Workers should be provided with suitable PPE such as overall, Safety boots, hand gloves, helmet, nose masks and Ear Plugs ▪ Provision of clean and accessible sanitary facilities and drinking water to workers ▪ Barricade the active work sites to limit entry of unauthorized people such as Use of screens and nets to avoid flying debris and ensure good housekeeping at the construction site ▪ Trenches over 0.5m deep or wherever soil conditions dictate should be secured against accidental fall by workers and the public ▪ Install information and safety signage along the work areas ▪ Site should have an accessible GRM to allow workers/community to raise safety issues and propose improvements of project sites ▪ Electrical works and installations should be done by a trained and certified experienced personnel ▪ Ensure all vehicles, equipment and machine are inspected, repaired and maintained before use, and machine		

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		operators are trained on machine use and safety ▪ Task based risk assessment should be done on daily basis to assess the risks and hazards thereby prescribing the appropriate prevention measures ▪ A safety officer shall be designated at the construction site and shall maintain a log of incidents (safety register) on site and report on any fatalities related to the project within 24 Hrs ▪ All workers participating in the construction should be provided with adequate and appropriate PPE and enforce on use ▪ The contractor should comply with provisions of WIBA, 2007 for all the workers engaged		
Traffic Flow and Traffic Related Accidents **During construction of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs**	▪ Increased movement of vehicles to and from the project site may result to traffic disruptions and accidents	▪ Design the layout of the workplace to minimize interactions between pedestrians and vehicles ▪ Careful planning and controlling vehicle operations and pedestrian movements at the workplace ▪ Develop in consultation with the proponent, a traffic management plan for the proposed project providing clear traffic map showing entrances and exit points for vehicles construction materials, segregating traffic safety, equipment operation and walking areas	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
g. Installation of food storage silos **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**		among other details ▪ To reduce on conflicts and possible injuries ▪ Contractor shall emphasize safety aspects among project drivers, especially speed limits to the institution ▪ Contractors should regularly inspect vehicles, safety and employed trained drivers to minimize potential traffic related accidents		
Noise and vibration generation During construction of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks**	Noise emissions from machineries and vibration from construction activities	▪ Inform the 43 institutions administration when constructions activities are likely to generate excessive noise, ▪ Noise suppression measures must be applied to all construction equipment such as installing portable barriers to shield compressors and other small stationary equipment, cover engine of generators where necessary; ▪ Use of quiet equipment (i.e., equipment designed with noise control elements such as those that utilize electricity as opposed to those which utilize diesel or petrol) and ensure all the equipment used on site are well maintained and in good working condition, ▪ Limit pickup trucks and other small equipment to a minimum idling time and observe a common-sense approach to vehicle use, and encourage workers to shut off vehicle engines whenever	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
l. Truncated ponds		possible; ▪ Provision of appropriate PPE (hearing protection - ear muffs/plugs) to the workers and any other person visiting the construction site especially in work areas with heightened noise levels, ▪ Limit construction activities during day time, between 8am and 5pm; ▪ Consider manual labour-based construction methodologies; and ▪ Construction workers should be made aware of the sensitive nature of the work place (learning institution) and advised to limit verbal and other forms of noise		
Increased Energy consumption **During construction of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks**	Reduction of resources and strain on them	▪ Ensure planning of transportation of materials to ensure that fossil fuels (diesel, petrol) are not consumed in excessive amounts ▪ Promote conservation of electricity used during the construction phase and operation phase – use energy saving bulbs for lighting, ▪ The facilities designs should maximize the use of natural ventilation and lighting to the extent possible. ▪ Liaise with proponent to apply a meter for use during construction to monitor on power consumption and keep records	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
k. solarised water boreholes and water kiosks **l. Truncated ponds**				
Interference with Internal storm water flow **During construction of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**	Increased flooding/pollution of surface water water	• Ensure proper construction of the storm water drainage system and appropriate channelling • Use of storm water management practices that slow peak run-off flow, reduce sediment load and increase infiltration. ▪ Regular inspection and maintenance of permanent erosion and run-off control features.	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000
Fire risks and hazards **During construction of** **a. Micro irrigation schemes** **b. Roof catchment**	Fire incidences leading to property and human life loss	▪ Provide fire extinguishers during their construction work at strategic positions and ensure servicing is done ▪ Key staff shall have basic training in fire control ▪ Fire emergency telephone numbers	County Government, NEMA, NACONEK PMU NACONEK E&S Experts,	1,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
c. Installation of energy saving jikos **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**		should be displayed within construction areas ▪ The contractor shall prepare a fire emergency management plan ▪ Provide serviceable fire safety equipment and workers on use ▪ identify a designated fire assembly point	Respective learning institution Contractors	
Social Risks **During the construction of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing**	Increase in unregulated food kiosks	▪ On-site kiosk services with adequate sanitation to be allowed within the project construction site ▪ The workers will have designated areas for eating and resting. ▪ Only licensed vendors by public health will be allowed to operate food kiosks near the project site	County Government, MOH NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000
f. Construction of Micro hubs **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms**	Increased risk of spread of COVID-19 on site	▪ Observation of the recommended 1.5m social distancing ▪ Use of face mask by all staff on site ▪ Sanitization of all project vehicles and equipment. ▪ Contractor should provide appropriate	County Government, MOH NEMA, NACONEK PMU	1000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
j. New toilet blocks **k. solarised water boreholes and water kiosks** **l. Truncated ponds**		sanitation facilities including hand washing facilities (soap/ water) at site entrances and exits. To promote hand hygiene by regularly washing hands with soap. ▪ Taking of body temperature of all staff and any other personnel visiting the site. The temperature should not be above 38°C. ▪ Any individual with cough and have flu like symptoms of chest infections, illness such as fever, difficulty in breathing and sneezing with history of travel will be advised to go for assessment and prompt management. ▪ Any staff who have a history of travel or come in to contact with a person who is infected should isolate and be made to self-quarantine for 14days. ▪ All working areas will always be kept clean and well ventilated. ▪ There will be provision of hand sanitizers in all offices and other entry points. ▪ Sensitization meetings to the employees- where the staff continue to receive and communicate to them, the latest updates, requirements, and educational information meant to prevent the spread of COVID-19. ▪ Display posters and signs on notice boards and entry points on COVID 19	NACONEK E&S Experts, Respective learning institution Contractors	

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		measures ▪ Contractor to procure enough PPE/working gears to avoid sharing. ▪ Redesigning work processes for specific work activities and tasks to enable social distancing, and training workers on these processes. Avoid congregation of more than 15 workers at one location. Where more than one person is gathered, maintain social distancing of at least 2 meters.		
	Risk of Increased prevalence of HIV /AIDS and other STIs	▪ Hiring workers from the local community to reduce the risks associated with labor influx; ▪ Education and sensitization of workers and the local communities on HIV/AIDS and STIs including provision of condoms to the project team and the public; ▪ The contractor has to institute HIV/AIDS awareness and prevention campaign amongst workers and the local communities for the duration of the contract e.g., erect and maintain HIV/AIDS information posters at prominent locations as specified; ▪ The contractor has to ensure that staff are made aware of the risks of contracting or spreading sexually transmitted diseases	County Government, MOH NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000
	Labour influx-related impacts	▪ Priorities the hire of both skilled and unskilled workers from within the locality hence limited movement or very	County Government, Labour Offices	3,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		short distances from their homes; ▪ Provide equal opportunities for employment of women and youths ▪ The skilled labour force from far to reside in hotels in close proximity to the project area; ▪ The contractor to ensure that the hiring process is done with fairness and gender sensitivity; ▪ Effective contractual obligations for the contractor will be done with workers to adhere to the mitigation of risks against labour influx ▪ The contractor to keep proper and updated records of the labourers on site while avoiding child and forced labour; ▪ Fair treatment, non-discrimination and equal opportunity of all labourers ▪ The contractor and worker should sign a code of conduct (CoC) as an annex to the employment contract – covering issues such as zero tolerance of unacceptable conduct in the community, GBV, sexual harassment, sexual exploitation and abuse of children, etc ▪ Ensure all project workers have contracts with terms and conditions that are consistent with national labour laws and policies ▪ Create awareness on national labour laws and practices to all community segments	NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		and project workers ▪ The project shall also have GRMs for project workers (direct workers and contracted workers) to promptly address their workplace grievances; ▪ The project shall respect the workers' right of labor unions and freedom of association; ▪ Ensure overtime is recorded and compensated ▪ Register contractor workers with WIBA		
	Gender Based Violence/SEA	▪ Ensure that during recruitment of workers there will be no discrimination against one gender either by design or oversight; ▪ Ensure that there is equal pay for equal work among gender and fair compensation for excess working hours; ▪ Contractors will ensure there is appropriate sanitary, health and safety facilities measures, such as PPE; ▪ Contractor to engage an expert to conduct a training and sensitization on GBV/SEA-H. ▪ The contractor to ensure provision of the necessary basic sanitary facilities according to the gender (separate for men and women) ▪ Contractor to put in place mechanisms for reporting and addressing GBV and other human rights violations.	County Government, Labour Offices NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors Gender Hospital Adjacent MOH facilities	6,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		▪ Educate all project workers on preventing and responding to Sexual Exploitation and Abuse prior to implementation of civil works sub-projects that may involve labor influx (whether from sub-project area, other sub-counties, counties, or other parts of the country or internationally). ▪ The contractor should develop a code of conduct which should encompass clear warning to workers on any kind of sexual exploitation and abuse. ▪ The contractor should provide a mechanism where workers are free to report any sexual advances and abuse to the senior management without fear of intimidation ▪ Establish partnerships with GBV service providers and schools, local administration with relevant government agencies and NGOs to ensure survivors of GBV and sexual offenses access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary		
	Grievance arising from construction activities	▪ Assigning a contractor based GRM Focal Person ▪ Putting in place channels to allow people complaint- e.g., telephone, email, registers, whatsup platform for workers, suggestion box among others	County Government, NEMA, NACONEK PMU NACONEK E&S Experts,	

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		▪ Ensuring documentation of complaints-Complaints registers ▪ Raise awareness to all stakeholders including project workers on the existing GRM and sensitizing them on the need to register their dissatisfaction with the contractor or the facility ▪ Resolve complaints within the project timeline (acknowledging within 7 days and resolving within 21 days or as soon as possible (within 24 hours for GBV/SEA complaints) ▪ Ensure complaints reporting to the PMT on a monthly basis ▪ Ensure all reported grievances are logged, dated, processed, resolved and closed out in a timely manner. ▪ Ensure the GRM provides for confidential reporting of particularly sensitive social aspects such as GBV, VAC as well as anonymity for those who wish to report anonymously.	Respective learning institution Contractors	
	Child Labour Risks	• Workers will be educated by relevant agencies such as police and probation officers on the relevant laws and polices protecting children • Reach out to children in and out of school in the vicinity of the construction sites with a life skills program focusing on HIV/AIDS and sexual abuse prevention among others areas		

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		• Strengthen school based and school led life skills programs targeting any schools near construction sites • Mobilise and strengthen child protection institutions and structures near construction sites • Reach out to school authorities and parents near construction sites on paying special attention to child protection in light of labour influx • Partnerships will be established with relevant government agencies and NGOs to ensure children access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary • Ensure no children are employed on site in accordance with national labour laws • Ensure that any sexual exploitation and abuse (SEA) of children by the contractors' workers are promptly reported to the police • Popularize /put in place confidential mechanisms for reporting child abuse cases • Enforce the child protection related clauses in the Code of conduct signed by all workers • Ensure visibility of signage and information, education and		

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		communication materials on such issues in the construction sites • Wherever possible, ensure that another adult is present when working in the proximity of children • Ensure that recruitment inventory indicates the ages of employment applicants and age verification is done using the national identification cards • Handle learners with dignity and use language appropriate to the child's age • Ensure that the channels for channelling complaints related to children are displayed in the institution e.g. the child helpline 116		
	Alcohol and drug abuse	▪ During workers' orientation, they should be clearly informed of no drug or alcohol abuse within the construction site and during working hours ▪ The supervisor should not allow any worker entry to the construction site who is under the influence of drugs or alcohol ▪ Contractor to establish a designated smoking zone ▪ Provide posters sensitizing workers on the dangers of alcohol abuse	County Government, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1,000
	Grievance arising from construction activities	▪ Put in place grievance redress mechanisms e.g., ▪ Assigning a contractor based GRM Focal	County Government, NACONEK PMU	2,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		Person ▪ Putting in place channels to allow people complaint- e.g., telephone, email, registers, What's up platform for workers, suggestion box among others ▪ Ensuring documentation of complaints- Complaints registers ▪ Raise awareness to all stakeholders including project workers on the existing GRM and sensitizing them on the need to register their dissatisfaction with the contractor ▪ Resolve complaints within the project timeline (acknowledging within 7 days and resolving within 21 days or as soon as possible (within 24 hours for GBV/SEA complaints) ▪ Ensue complaints reporting to the PMT on a monthly basis	NACONEK E&S Experts, Respective learning institution Contractors	
	Non-user-friendly buildings for PWDs	▪ All buildings will be designed and built with ramps and other special facilities such as toilets to facilitate access and use by PWDs	County Government, National Body of PLWDs NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	1000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
	Poor sanitation due to sharing of sanitation facilities	• Provide adequate clean sanitation facilities for the workers both male and females at the ratio of 1:25 for men and 1:20 for women. Clean water should be always available to maintain hygiene • Expressly instruct workers to use the designated facilities at the construction site and have minimal interactions with the institution learners and fraternity if any needed laid out channels and reporting hierarchy should be used	County Government, MOH NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors	2500
	Disruption of schooling	• Ensure NO children are employed on site in accordance with national labour laws • Popularize /put in place confidential mechanisms for reporting child abuse cases • Institutionalize zero tolerance to child exploitation and abuse and include a clause in contractors code of conduct deterring the sub-project from engaging in child labour	County Government, NEMA, NACONEK PMU NACONEK E&S Experts, Respective learning institution Contractors Parents Local administration	1500
Operation Phase				
Solid Waste Management Operation of **a. Micro irrigation schemes** **b. Roof catchment**	Improper waste management	▪ Waste should be identified and segregated at the point of generation. Non-hazardous waste, such as paper and cardboard, glass, aluminum and plastic, should be collected separately and recycled. Food waste should be	County Government, NACONEK PMU NEMA Respective learning institution	3,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
c. Installation of energy saving jikos **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**		segregated and composted. ▪ Prevention and minimization of the production of waste (integrating systems and practices to avoid the creation of waste into facility design and management and equipment and consumables purchasing). ▪ Reuse or recycling of wastes to the degree feasible ▪ Transport waste to storage areas on designated trolleys / carts, which should be cleaned and disinfected regularly. ▪ Contract a NEMA licensed waste collector for regular collection and disposal at County approved sites		
Occupational Safety and Health Risks for workers Operation of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos**	Occupational Safety and Health Risks for workers	▪ Control over area generating dust particles through regular cleaning or sprinkling of water to reduce dust. ▪ Conduct regular air monitoring and tests to analyze the quality of air from incineration emissions. ▪ Provide personal protective equipment (PPE) to the workers operating	County Government, DOSH, NACONEK PMU Respective learning institution	3500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
h. Girls' hostels **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**				
Liquid Waste Generation During operation of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**	Unsanitary conditions	▪ The internal and external sewer system should be made of hard, strong, durable, smooth impervious and non-corrodible materials ▪ In-case of any sewer leakage, it should be repaired immediately to avoid possible soil and water contamination ▪	County Government, DOSH, NACONEK PMU Respective learning institution	2,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
Air Pollution **During operation of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**		x	County Government, DOSH, NACONEK PMU Respective learning institution	1000
Increased Energy Demand **During operation of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing**	Strain on the sources	▪ Solar heating in the hostels ▪ Solar street lighting ▪ Orientation of the building to avoid artificial air conditioning. • The proponent will apply for an additional transformer from the Kenya Power and will monitor power consumption and keep records, • Encourage the use of energy saving bulbs	County Government, DOSH, NACONEK PMU Respective learning institution	2000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
f. Construction of Micro hubs **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**				
Possible COVID 19 Exposure During operation of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks**	Risks to contracting the disease or spreading to others	▪ Observation of the recommended 1.5m social distancing ▪ Use of face masks by all workers at site ▪ Sanitization of all project vehicles and equipment. ▪ Maintenance of basic hand hygiene by regularly washing hands with soap. ▪ Taking of body temperature of all workers and any other personnel visiting the site. The temperature should not be above 38°C. ▪ Any individual with cough and have flu like symptoms of chest infections, illness such as fever, difficulty in breathing and sneezing with history of travel will be advised to go for assessment and prompt management. ▪ Any staff, trainee who has a history of travel or come in to contact with a person who is infected should isolate and be made to self-quarantine for 14days. ▪ All working areas will always be kept clean	County Government, DOSH, NACONEK PMU Respective learning institution MOH	1000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
l. Truncated pond		and well ventilated. ▪ There will be provision of hand sanitizers in all offices and other entry points. ▪ Sensitize staffs and trainees on signs and symptoms on COVID 19 ▪ Place signs and posters to create awareness to project workers on COVID-19; ▪ Regularly assess work force characteristics and adjust work practices such as avoiding concentration of more than 15 workers per site when more than one person is gathered maintain social distance of at least 2 meters; ▪ Provide an easily accessible GRM to raise work place concerns relating to COVID-19; such as encouraging reporting of co-workers if they show outward symptoms. ▪ Sensitize and encourage vaccinations.		
Fire Risk **During operation of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos**	Risk of fire outbreak	▪ Provide fire extinguishers at strategic positions and ensure servicing is done ▪ Key staff shall have basic training in fire control ▪ Fire emergency telephone numbers should be displayed in communal areas. ▪ The institution shall prepare a fire emergency management plan ▪ Undertake regular fire drills at the 43 learning institutions to test on emergency response and use the results to improve on the response mechanism	County Government, DOSH, NACONEK PMU Respective learning institution	2,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
h. Girls' hostels **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **l. Truncated ponds**				
Environment pollution During operation of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**	Solid waste generation	▪ Purchase dustbins and strategically place within the building ▪ Encourage solid waste segregation through mark of the dustbins for organic and inorganic solid waste for purpose of separation ▪ Contract a NEMA licensed waste collector for regular collection and disposal at County approved sites ▪ Clean storm water drains to minimize clogging ▪ The proponent to reduce, recycle, reuse strategies. ▪ The proponent to engage services of a recycler.	County Government, NEMA NACONEK PMU Respective learning institution	3000
	E-waste generation	▪ Procure Electronic devices from credible manufactures to avoid purchasing second hand, refurbished or obsolete devices	County Government, DOSH,	2,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		with a short shelf life or already categorised as E-Waste ▪ Recycle all E-waste by establishing linkages with an E-Waste Collection Centres ▪ Have 3rd parties to collect and transport all E-wastes to approved Recycling Company or the recycling companies themselves ▪ Conduct awareness and sensitization targeting the users of the electronic devices to ensure that they engage in best practise for E-waste management.	NACONEK PMU Respective learning institution	
Increased Water Use at proposed institutions During operation of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks**	Increased water uses and liquid waste generation	▪ Put roof gutters to collect rainwater from the facility iron sheet during the rainy season, ▪ Encourage prompt maintenance of water pipeline leaks, ▪ Install water conserving taps that turn-off automatically when water is not being used,	County Government, NEMA NACONEK PMU Respective learning institution	1,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
k. solarised water boreholes and water kiosks **Truncated ponds**				
Use of electricity **During operation of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**	Increased energy use	▪ Install solar security lights	County Government, KP NACONEK PMU Respective learning institution	1,500
Social Risk Management **During operation of** **a. Micro irrigation schemes**	GBV/SEA - H	• Continues sensitization of staff and students including nearby community on GBV/SEA-H risk management	County Government, NACONEK PMU Respective learning institution	5,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
b. Roof catchment **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**		• Provision of GRM channels for reporting SEA cases • Ensuring that the GBV/SEA one pager is placed on strategic points of the institution • Document available GBV/SEA referral pathways for victims' information and support • Develop an Action plan of all GBV/SEA incidences to avoid recurrence. • Ensure the facility is well lit to avoid hiding places for SEA perpetrators. • Provision of separate sanitation facilities for men and women • To include prohibition of GBV/SEA in Employees Code of conduct e.g. discouraging the use of inappropriate language or behavior, harassing, abusive, sexually provocative, demeaning or culturally inappropriate language towards women or children. • Prohibiting sexual activity with children under 18 years—including through digital media and promoting respect to the rule of law in respect to children's rights. • Establish partnerships with GBV service providers and schools, local	County Gender Officer	

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		administration with relevant government agencies and NGOs to ensure survivors of GBV and sexual offenses access survivor centred services such as medical care, psychosocial support, legal redress, safety, etc as and when necessary Identify and map out all the GBV service providers (referral pathways) and provide support to ensure survivors access such services with ease. • Impose zero tolerance on all forms of gender-based violence including sexual exploitation and abuse and sexual harassment and discrimination at all phases of the project. Ensure workers sign a Code of conduct prohibiting all forms of GBV.SEA-H • Ensure visibility of signage and information, education and communication materials on GBV issues		
	Insecurity Concerns	▪ The institution suggested to liaise with the nearby police station to increase their presence and patrols within to improve on the security situation at the institution ▪ It was suggested that the institution was looking on raising the which was acting as a security threat for the institution	County Government, Local Administration NACONEK PMU Respective learning institution	1,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
		▪ The security guards should ensure proper surveillance of the facility ▪ Security guards should be sensitized on the CoC and the provision of the Security management plan		
	Increased grievances and conflict	▪ The institution should create awareness about the GRM mechanism in place to all workers and students ▪ Disclose all the avenues for receiving complains ▪ Ensure appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants ▪ Ensure that all documentation of all grievances received, processed and closed out ▪ Ensure the GRM is efficient and addresses all grievances within time-frame outlined in the grievance charter ▪ Display/disclose the grievance charter in public places within the institution ▪ Allow for use of judicial process, if the complainant is dissatisfied with the resolution provided through the project GRM	County Government, NACONEK PMU Respective learning institution County Labour Officer	3,000
Equipment/ Machine Decommissioning **During decommissioning of**	▪ Soils Degradation	▪ All machinery, equipment, structures and partitions that will not be used for other purposes must be removed, and containerized for disposal by NEMA	County Government, DOSH, NACONEK PMU	3,000

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
a. Micro irrigation schemes **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**		licensed waste handler. ▪ Where recycling/reuse of the, equipment, implements, structures, partitions and other demolition waste is not possible, the materials should be taken to a licensed waste disposal site	Respective learning institution Contractor	
Structures Decommissioning During decommissioning of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy sạving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs**	▪ Soils degradation / water Resources pollution / air pollution	▪ All foundations must be removed and recycled, reused or disposed of at a licensed disposal site ▪ All anchorages plinths must be removed, recycled, reused or disposed by NEMA licensed waste handler ▪ Use dust screens and nets to mitigate on dust/particulate matter	County Government, DOSH, NACONEK PMU Respective learning institution Contractor	2,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
g. Installation of food storage silos **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**				
Demolition Wastes During decommissioning of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**	▪ Soils pollution / air pollution / water resources pollution	▪ Use an integrated solid waste management system I.e. through hierarchy of options 1. Source reduction 2. Recycling, 3 Composting and reuse 4. Combustion. 5 Sanitary land-filling ▪ Ensure proper waste collection, storage and disposal of waste generated ▪ Donate reusable demolition waste to charitable organizations, individuals and institutions ▪ Properly dispose of the demolition debris when no longer considered useful	County Government, DOSH, NACONEK PMU Respective learning institution Contractor	2,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
Project Decommissioning **During decommissioning of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**	▪ OHS/ Public Safety	▪ The decommissioning Contractor should have a well-developed EHS plan for the decommissioning exercise ▪ A qualified EHS officer should be stationed at the decommissioning site during the entire decommissioning period to ensure compliance to Health and safety plan. ▪ Ensure the workers are provided with adequate and appropriate PPE (dust mask, ear plugs, helmets, gloves) on site and enforce on use ▪ While working at height provide safety harnesses and scaffolding equipment ▪ Fence off/ barricade the site prior to demolition to minimize health and safety risks ▪ Restrict demolition activities during day time between 0800hrs to 1700 hrs. ▪ Provide adequately well stocked first aid kit and ensure one of the workers can administer first aid.	County Government, DOSH, NACONEK PMU Respective learning institution Contractor	2,000
Site Rehabilitation **During decommissioning of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting**	▪ Soils pollution/water resources pollution/ Air pollution ▪ Backfilling excavation sites	▪ Proper treatment of the site should be carried out ▪ Ensure the contractors backfill and rehabilitate excavated sites before final payment	County Government, DOSH, NACONEK PMU Respective learning institution ▪ Contractor	2,845

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
e. Fencing **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**				
Re-Vegetation **During decommissioning of** **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks**	▪ Soils degradation/ water resources pollution/ air pollution	▪ Implement an appropriate re-vegetation programme to restore the site to its original status ▪ Consider use of indigenous plant species in re-vegetation		2,500

Key Activities	Potential Environment & Social Risks and Impacts	Proposed Mitigation Measures	Responsibilities	COST (USD)
k. solarised water boreholes and water kiosks **Truncated ponds**				
Social Risk Management During decommissioning of **a. Micro irrigation schemes** **b. Roof catchment** **c. Installation of energy saving jikos** **d. Wall painting** **e. Fencing** **f. Construction of Micro hubs** **g. Installation of food storage silos** **h. Girls' hostels** **i. New classrooms** **j. New toilet blocks** **k. solarised water boreholes and water kiosks** **Truncated ponds**	▪ Grievances arising from project decommission	▪ Ensure there is an operational GRM that is responsive to stakeholders' concerns ▪ Inclusive stakeholder engagement to raise awareness of the project decommissioning and clarify issues and consider the input of the affected and interested parties in the process ▪ The institution should continue to create awareness about the GRM mechanism in place to all workers and patients ▪ Ensure appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants ▪ Ensuring that there is a workable mechanism of opening complaints reported through suggestion boxes ▪ Document and report on all sub-project related grievances	Gender Officer, County Government, DOSH, NACONEK PMU Respective learning institution ▪ Contractor,	2,500
	USD 83,000			

Environmental and Social Monitoring Plan

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	cost
1	General impact issues	Clearly set out environmental and social requirements within tender documentation and include EHS scoring within selection criteria.	Before tender document advertisement	EHS requirements	One-off	NACONEK	5000
2	General impact issues	Contractor required to develop and implement a Construction Environmental Management Plan (CEMP) meeting the conditions set out in the environmental authorization, as well as this ESIA and Bank requirements.	Before tender document advertisement	Contractor provides CEMP	One-off	Contractor	7500
3	Water quality	Do not dump any construction waste material in water bodies. Avoid, if possible, chemical fertilizer pollution by use of organic fertilizers for small farms Regularly maintain Programme equipment to avoid leaks and spills Do not undertake maintenance near a water source Do not dump waste material into a River or Land Locate contractor camp sites, waste disposal and spoil dumping areas away from water sources	During Programme construction phase	Visual audits/spot checks Good housekeeping at the Programme site Well drained Programme site Areas used for temporary construction activities fully restored	Weekly	NACONEK/ Contractor	6500
4	Water availability	Enhance positive impact of AWG by avoiding contamination of water by dust and other pollutants Plant grass species especially of indigenous origin along the irrigation channels	During Programme implementation/activities	Records of water utilisation No recorded incidents or	Daily	Contractor	5500

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	cost
		Select water abstraction points based on a hydrology study Obtain permits from WRMA prior to water abstraction and observe the conditions therein Avoid abstracting water from points used by the local community members. Only extract the water quantities that are needed to meet the Programme requirements. Monitor the water levels during water abstraction. If the water levels are lower than expected, an alternative location should be identified. Schedule the water abstraction activities to avoid the times of the day when the affected community members need it more Install water storage tanks especially at schools to store water for future.		grievances to surrounding water users			
5	Noise (and vibration) environment	• Limit construction activities to school off time only. • Share the construction schedule with all the affected stakeholders indicating period when un-usual construction activities with extraordinary noise levels will be conducted. Share construction schedule with all the affected stakeholders Inform the neighbouring communities of any unusual activities with extraordinary noise levels including time, expected duration and any safety precautions.	During construction and operation phase	No recorded incidents or grievances to surrounding community Noise monitoring records	Monthly	NACONEK/ contractor	5500

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	cost
		Provide all construction workers with relevant PPE at all times while at work and enforce application. Construct an enclosure wall of noise generating permanent infrastructure eg watergen, food processing centre Construct waterway 300 m away from residential area					
6	Soil	Enhance positive impacts Use organic fertlisers to enhance soil quality and compact soil to avoids erosion Plant Vetiver grass in across the water abstraction channel every 4m Transfer top 30 cm deep excavated soil and use for gardening. Use excavated soils below 30cm which are not fertile for road construction Layout soil conservation measures that include countour vetiver grass strips, countour earth bunds or contour stone bunds depending on available materials. Apply an integrated soil amelioration interventions that include the use of lime and organic fertilizers.	During Programme construction phase	Visual audits/spot checks Programme activities limited within Programme footprint Areas used for temporary construction activities fully restored	Monthly	NACONEK/ contractor	3000
7	Air quality	Issue all the Programme workers appropriate PPE Maintain all the construction equipment and vehicles as per the manufacturers' instruction to avoid unnecessary emissions of excess exhaust gases. Prevent unnecessary idling of Programme equipment and vehicles	During Programme construction and operation phase	No recorded incidents or grievances to surrounding land users Records of audits/visual inspection	Daily	Contractor	5500

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	cost
8	Flora	Removal of vegetation should be on an as needed basis Limit vegetation clearance to areas within the Programme footprint. No interference with vegetation or other natural features outside the Programme footprint area	During Programme construction and operation phase	% of Programme cleared/used area to vegetated area Restoration audits and monitoring	Monthly	NACONEK/ contractor	2500
9	Wastes and effluents	Preparation and implementation of a Waste Management Plan (WMP). waste minimisation at source, segregation for reuse, recycling, and safe disposal of waste. Use applicable law on waste water regulation (2016) and e-waste regulation e-waste generated should be disposed of on pre-identified and approved locations The use, storage, transport and disposal of hazardous materials used for the Programme will be carried out in accordance with all applicable Kenyan regulations The sewage/waste water will be treated in accordance with the applicable laws	During Programme construction and operation phases	An effective WMP in place Records of audits/visual inspection	Monthly	Contractor/NACONEK	2000
10	Employment/procurement/economy	Prioritise the employment of unskilled labour from the local communities where feasible Develop a fair and transparent employment and procurement policy and process that manages out any potential nepotism and favouritism. The Programme should prioritise the procurement of goods and services from the local communities Prioritise the procurement of goods and services from within the Programme counties.	During Programme construction and operation phase	Requirements for local employment included in contract established with the Contractor. Employment records	Preparation of guiding documents prior to construction Employment records checked monthly	NACONEK/ contractor	8000

Code	impacts	Mitigation measure	Deadline for measure	Completion Indicator	Monitoring /oversight	Responsibility for implementation	cost
		Procure locally available materials where feasible and use local suppliers where appropriate.					
11	Impact on Labour and working condition	The Programme should develop and implement an Occupational Health and Safety Management System. This systems should include use of Personal Protection Equipment (PPE), Develop a HR Policy and Labour & Employment Plan (LEP), including worker Grievance Mechanism Ensure contracts abide by Kenyan Labour Laws/ International Best Practice /AFDB Bank Standards	During construction and operation phase	Employment records and other KPIs for worker rights A record of workers' grievances	Monthly	NACONEK	10000
12	Impacts on cultural heritage	Preserve chance finding	Construction phase	Chance finding	During project implementation	NACONEK	1000
TOTAL				**USD 62,000**			

CHAPTER NINE

9.0 GRIEVANCE REDRESS MECHANISM

Grievance redress mechanisms (GRM) provides a formal avenue for ensuring that complaints/grievances associated with project activities are efficiently and effectively responded to. Grievances are any complaints or suggestions about the way a project is being implemented. They may take the form of specific complaints for damages/injury, concerns about routine project activities, or perceived incidents or impacts. Identifying and responding to grievances supports the development of positive relationships between projects and affected groups/communities, and other stakeholders.

Grievance mechanisms should receive and facilitate resolution of the affected institutional or communities' concerns and grievances. AfDB standards states the concerns should be addressed promptly using an understandable and transparent process that is culturally appropriate and acceptable to all segments of affected communities, at no cost and without retribution. Mechanisms should be appropriate to the scale of impacts and risks presented by a project.

Grievances can be an indication of growing stakeholder concerns (real and perceived) and can escalate if not identified and resolved. The management of grievances is therefore a vital component of stakeholder management and an important aspect of risk management for a project. Projects may have a range of potential adverse impacts to people and the environment in general, and identifying grievances and ensuring timely resolution is therefore very necessary.

The following sections describe the proposed procedures that will be followed to address complaints or concerns submitted by people who may benefit from or impacted byIMPRESSeD Programmes and subprojects. It intends to provide clarity and predictability on how complaints will be received, assessed, sorted, resolved and monitored.

9.1 Grievance Redress Mechanism Principles

Effective GRMs usually embody six core principles;

- **Fairness.** Grievances are treated confidentially, assessed impartially, and handled transparently.
- **Objectiveness and independence**. The GRM operates independently of all interested parties in order to guarantee fair, objective, and impartial treatment to each case. GRM officials have adequate means and powers to investigate grievances (e.g., interview witnesses, access records).
- **Simplicity and accessibility**. Procedures to file grievances and seek action are simple enough that project beneficiaries can easily understand them. Project beneficiaries have a range of contact options including, at a minimum, a telephone number (preferably toll-free), an e-mail address, and a postal address. The GRM is accessible to all stakeholders, irrespective of the remoteness of the area they live in, the language they speak, and their level of education or income. The GRM does not use complex processes that create confusion or anxiety (such as only accepting grievances on official-looking standard forms or through grievance boxes in government offices).
- **Responsiveness and efficiency.** The GRM is designed to be responsive to the needs of all complainants. Accordingly, officials handling grievances shall be trained to take effective action upon, and respond quickly to, grievances and suggestions.
- **Speed and proportionality.** All grievances, simple or complex, shall be addressed and resolved as quickly as possible. The action taken on the grievance or suggestion is swift, decisive, and constructive.

- **Participatory and social inclusion.** A wide range of project-affected people—community members, members of vulnerable groups, project implementers, civil society, and the media - shall be encouraged to bring grievances and comments to the attention of project authorities. Special attention is given to ensure that poor people and marginalized groups, including those with special needs, are able to access the GRM.

9.2 Grievance Handling Mechanism Structure

Members of the Grievance Redress Committee (GRC) at project Level
Composition of members is as follows:

1. Sub County Commissioner for all the Sub-County
2. Assistant County Commissioners
3. Representative of local community
4. Representative of students
5. Representative from a local CBO/NGO
6. Contractor Social Safeguard Specialist
7. NACONEKS Enviroment and Social safeguard Specialist
8. Representative from County NEMA offices
9. Representative of the NACONEK PMU
10. School heads/principals of the 43 institutions

The main role of the committee will be arbitration through mediation and negotiation when complaints arise to ensure that cases are resolved quickly and fairly. The above committee shall normally meet once per month and may form special sub-committees or ad-hoc committee that shall meet on a weekly basis or more frequently as the nature of some grievances may demand. Such sub-committees or special ad-hoc committee will report their findings and recommendations to the main committee for ratification or approval.

9.3 Key Staff Coordinating Grievance Redress

The PIU Environmental and Social Safeguards specialist will be designated as the person in charge of Grievance Redress with the following responsibilities;

- Coordinate formation of Grievance Redress Committees (GRCs) before the commencement of construction to resolve issues.
- Serve as the Focal Point Person for Grievance Redress at PIU
- Create awareness of the Grievance Redress Mechanism (GRM) amongst all the stakeholders through public awareness campaigns.
- Assist in Redress of all Grievances by coordinating with the concerned parties.
- Maintain information of grievances and Redress.
- Monitor the activities on Redress of Grievances.
- Prepare monthly/quarterly reports on all grievances received and processed.
- Provision of resources to cover the operational costs of the GRM.

9.4 Receiving Complaints

The various points of receiving complaints would be as follows:

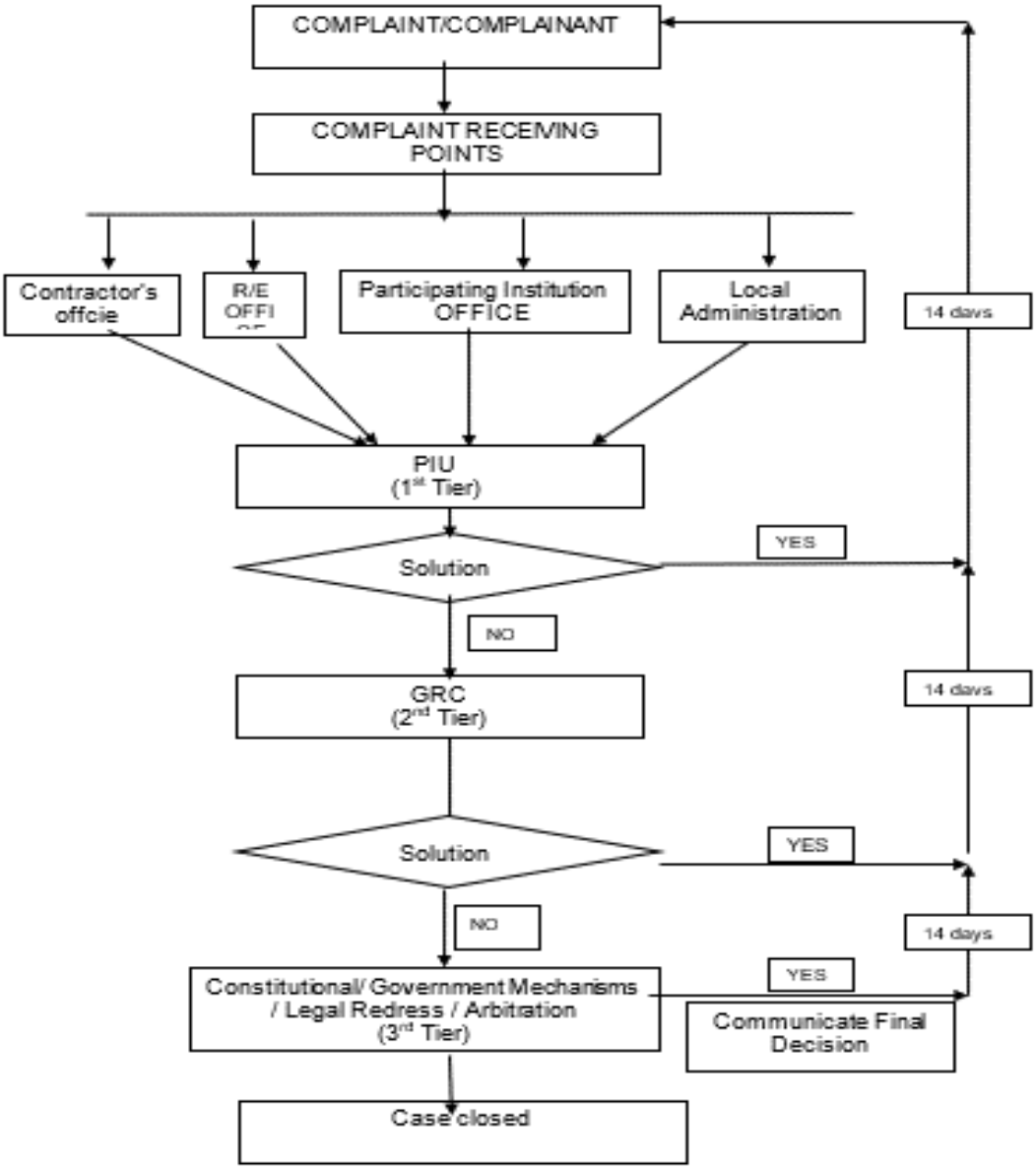
- Regional Government administration;
- Local chief's office;
- PIU office (at NACONEK)
- Contractor or Consulting team
- Ministry of Education
- Representative at the community level

9.5 Mode of Receipt and Recording of Complaints

Complaints can be made in writing, verbally, over the phone, by fax, emails or any other media. The stakeholders will be informed of various grievance uptake points during the grievance sensitization workshops. PIU will designate an officer to receive, record and collate all the complaint/grievance from these points on a regular basis. As soon as the officer receives a complaint, he /she would issue an acknowledgement receipt to the complainant including the details of the person bringing the grievance. The officer receiving the complaints should try to obtain relevant basic information regarding the grievance and the complainant and will immediately inform the PIU Environmental and Social Safeguard specialist on the receipt of the complaint

9.6 Grievance Redress Mechanism Process

A three tier Redress structure is proposed to address complaints under NACONEK project is as shown in Figure 9.1.



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a) First Tier of Redress

The first level for grievance redress will be at the PIU level where the PIU Environmental and Social Safeguard Specialist (PIU ESSS) is designated as the person in charge of Grievance Redress. The PIU ESSS will be responsible for maintain the Grievance records and ensuring the register/log book is kept up to date. After registering the complaint, the safeguard specialist would study the complaint made in detail and forward the complaint to the concerned officer with specific dates for replying and redressing the same. If necessary, meetings have to be held with the concerned affected persons / complainant and the concerned parties to find a solution to the problem and fix up plans to redress the grievance. The deliberations of the meetings and decisions taken are recorded and minutes of the meetings filed.

The resolution at the first tier will be done within 14 working days and notified to the concerned through a disclosure form. If the Grievance is not resolved within this period, this would be referred to the next level of Grievance Redress. However, if the PIU feels that adequate solutions are worked out but it would require a few more days for actions to be taken, he/she can decide on retaining the issue at the first level by informing the complainant accordingly. However, if the complainant requests for an immediate transfer of the issue to the next level, it would be accepted and the issue would be taken to the next tier, especially if the issue is not addressed within 21 days.

b) Second Tier of Redress

The Grievance Redress Committee (GRC) constituted by NACONEK will be the second tier for grievance management. All grievances that cannot be resolved at the first tier will be referred to this level for redress. It is important to ensure that the GRC is constituted prior to commencement of the project. The PIU ESSS will coordinate with the NACONEK PMU and respective chairman of the GRC in getting this Committee constituted and get the necessary circulars issued in this regard so that they can be convened whenever required.

The PIU ESSS will coordinate the convening of the meetings of the GRC. He / She is also responsible for briefing the GRC on the grievances and deliberations of the first level of Redress, outcomes and on the views of both the parties (project proponent and complainant).

The GRC will hold the necessary meetings with the affected party / complainant and attempt to find a solution acceptable at all levels. The GRC would record the minutes of the meeting and filed by the PIU. The decisions of the GRC will be communicated to the complainant formally and if he/she accepts the resolutions, the complainant's acceptance is obtained in writing and signing off is done between the complainant and the GRC.
If the complainant does not accept the solution offered by the GRC, then the complaint is passed on to the next level / or the complainant can reach the next level for redress. The Chairman of the GRC would be required to forward the issue to the Third Tier to facilitate in exploring a solution to the grievance. In any case, the grievance should be forwarded to the next level if no solution is reached within 14 days of the case reaching the second level. However, in cases where there are stron possibilities of finding an amicable solution, it can be retained to an maximum of 21 days.

c) Third Tier of Redress

If the affected party / complainant does not agree with the resolution at the 2nd level, or there is a time delay of more than a month in solving the issue, the complainant can opt to consider taking it to the third level where the complainant will be offered the option of reaching out to

an independent mediation process at an alternative arbitration body such as local arbitration arrangements, local administration, or other avenues as might be prescribed in the country constitution before legal redress. The PIU will collect all the details of the Grievance including the deliberations of first tier efforts and of the GRC and present it to the 3rd level tier. The 3rd tier structure will deliberate upon the issue and give suitable recommendations. The minutes of the meetings will be recorded and kept at the PIU office.

The decisions of the 3rd tier structure would be final from the project side and will be communicated to the complainant formally and if he/she accepts the resolutions, the complainant's acceptance is obtained and signed off by the complainant and the 3rd tier structure, including the project GRC.

The Complainant may decide to take a legal or any other recourse if he /she is not satisfied with the resolutions of the deliberations of the three tiers of GRM.

It should be encouraged that the 3 levels of handling the grievances should be exhausted extensively before one goes to courts as last resort.

Table 9.1: *Procedures and Timelines for Addressing Complaints*

Process	Description	Time frame	Other Information
Grievance Identification	Face to face; phone; letter, e-mail;	1 day	Email address; and a hotline number for reporting purpose
Grievance assessment and recording	Significance assessed and grievance recorded (i.e. in a log book) by the EHS officer hired by the contractor	4-7 days	Significance criteria: Level 1 – one off event; Level 2 – complaint is widespread or repeated; Level 3- any complaint (one off or repeated) that indicates breach of law or policy or this ESMF provisions
Grievance acknowledgment	Acknowledgement of grievance through appropriate medium	7-14 day	
Development of response	Grievance resolved at Tier 1 (Resolved at PIU level) Response development with input from institutional management/ relevant stakeholders	4-14 days	
Response signed off	Grievance closed Redress action approved at appropriate levels	Within above timelines	Project staff at NACONEKs to sign off
Grievance not resolved passed to GRC	Grievance passed to GRC- Tier 2 Redress Action approved at appropriate level	7-14 days	GRC and complainant to sign off
Implementation and communication of response	Redress action implemented and update of progress on resolution communicated to complainant	Within 7 days	
Complaints Response	Redress action recorded in grievance log book Confirm with complainant that	4-7 days	

Process	Description	Time frame	Other Information
	grievance can be closed or determine what follow up is necessary		
Grievance not resolved passed to Alternative Arbitration Body	Grievance passed to Alternative Arbitration Body for resolution-Tier 3. Final decision communicated to complainant	7-14 days	Alternative Arbitration Body to sign off Complainant to sign off
Close grievance	Record final sign off of grievance If grievance cannot be closed, return to step 2 or refer to EHS officer in consultation with the consultant or recommend third-party arbitration or resort to court of law/ National Environment Tribunal.	4-7 days	Final sign off on by the IMPRESSeD Secretariat, MOE Alternative Arbitration Body to sign off Complainant to sign off

9.7 Registry and Monitoring

All complaints received will be entered into a publicly accessible system that will allow complaints to be tracked and monitored. The system will also present a database showing:

- No of complaints received.
- No and % of complaints that have reached agreement.
- No and % of complaints that have been resolved.
- No and % of complaints that have gone to mediation
- No and % of complaints that have not reached agreement.

The database should also show the issues and geographic areas most complaints circle around. The information provided by the database is expected to help IMPRESSeD Programme to improve the Grievance Redress Mechanism and better understand and address the environmental and social impacts of the project.

9.8 GRM Jurisdiction

The proposed GRM is project specific and scaled to the risks and impacts of the Project. It is meant to solve the project's concerns by the stakeholders or any project affected person. The proposed GRM is however not intended to replace any Governments' own existing redress process; rather it is intended to ensure that affected people's concerns and complaints associated with project activities are addressed promptly and at the lowest level possible.

CHAPTER TEN

10.0 CONCLUSION AND RECOMMENDATIONS

10.1 Conclusions

The Environmental and Social Impact Assessment (ESIA) undertaken for the Project indicates that the Project will have moderate risks/ impacts which can be mitigated if the ESMP is compiled with. The Project area is located within 12 counties, 43 institutions and sensitive environment ecosystems identified within the 43 institutions will not be interfered with. The Environment and Social impacts will be less significant impacts and can be mitigated as discussed in **Chapter 8** of this assessment.

The proposed project provides essential benefits which cuts across local, county, national and regional levels. The project presents a great benefit to the learners in the marginalized counties as theis programme is only focused on poverty allievation.

As such, the projects should be licensed to allow commencement of the next phases of construction and, operation phases and activities carried out in compliance with the ESMP and sound environmental and social management practices that are locally and internationally recognized.

10.2 Recommendations

This assessment provides the following.

1. The provisions provided for Environment, Social Health and Safety concerns in the (Environment and Social Impact Assessment and Mitigation Plan (ESMP) should be adhered to.
2. The contractor to prepare and implement a site-specific Construction Environment and Social Management Plan (C-ESMP), within 14 days of contract signing.
3. The contractor will engage on a fulltime basis environment, social safeguards, gender-based officer and health and safety officer who will be in charge of ensuring compliance of the contractor to environment and social provisions provided in this assessment and Construction Environment and Social Management Plans (CEMP) prepared by the contractor. The officer will participate in monthly and quarterly meeting and will generate monthly and quarterly environment and social safeguards compliance reports. The contractor should also recruit a community liaison officer who will act as a link between the community and the contractor.
4. Compliance with the relevant existing laws and regulations related to the project.

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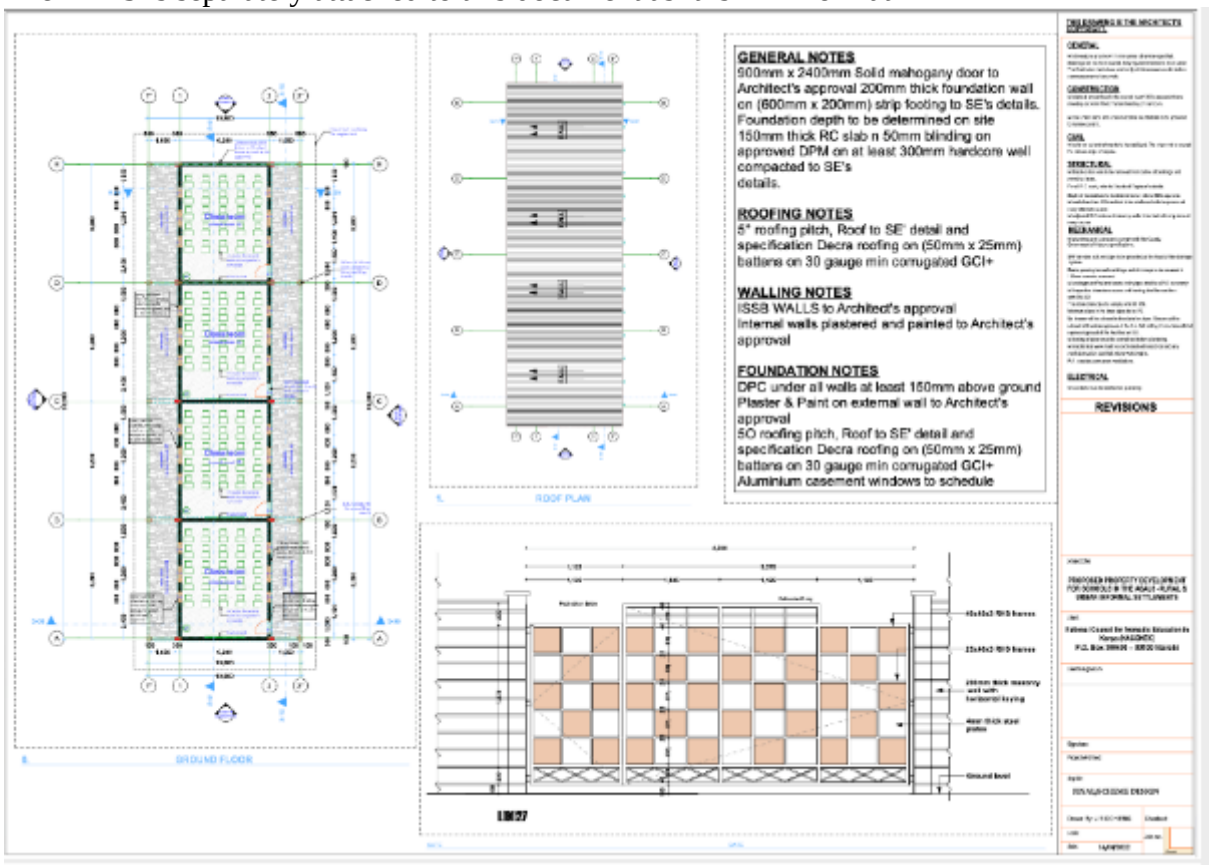
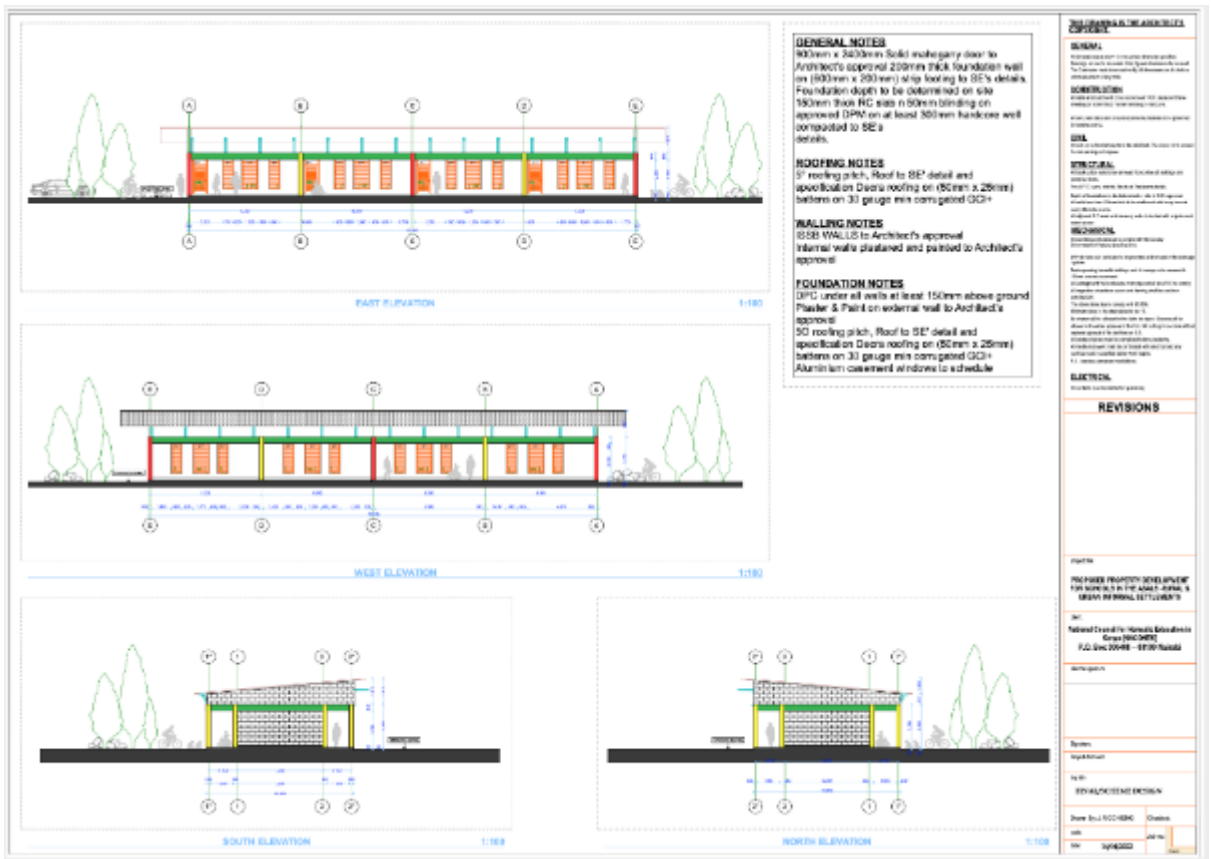
APPENDICES

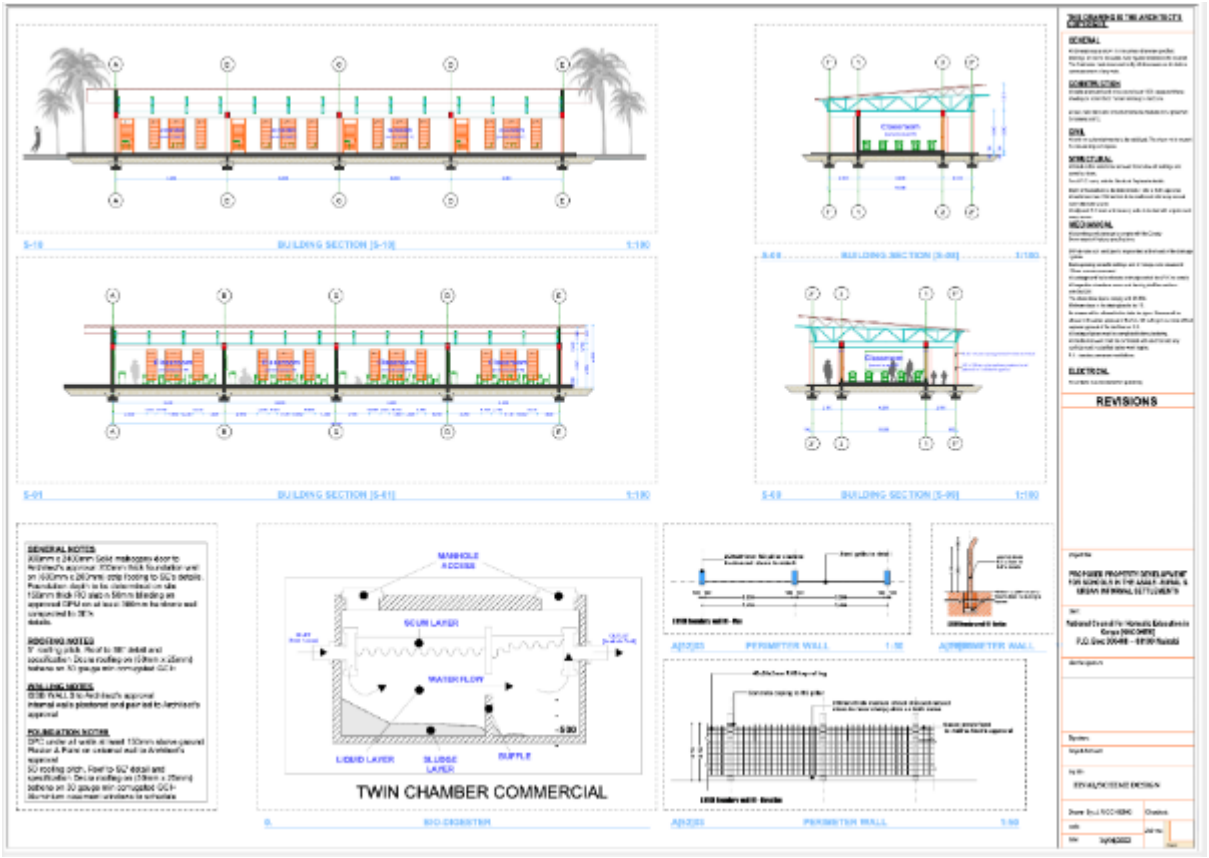
Appendix 1: Copy of NEMA Practicing Certificate for theFirms of Experts
Appendix 2: Architectural drawings of the classrooms
Appendix 3: Architectural drawings of Fences
Appendix 4: Architectural drawings of Ground Warer
Appendix 5: Architectural drawings of Ponds
Appendix 6: Architectural drawings of Reverse Osmosis Process
Appendix 7. Minutes of 13 consultative meetings
Appendix 8: Self administered questionnare

Annex C: Project Design for Schools (PDFS)

The PDFS is separately attached to this document as it is PDF format



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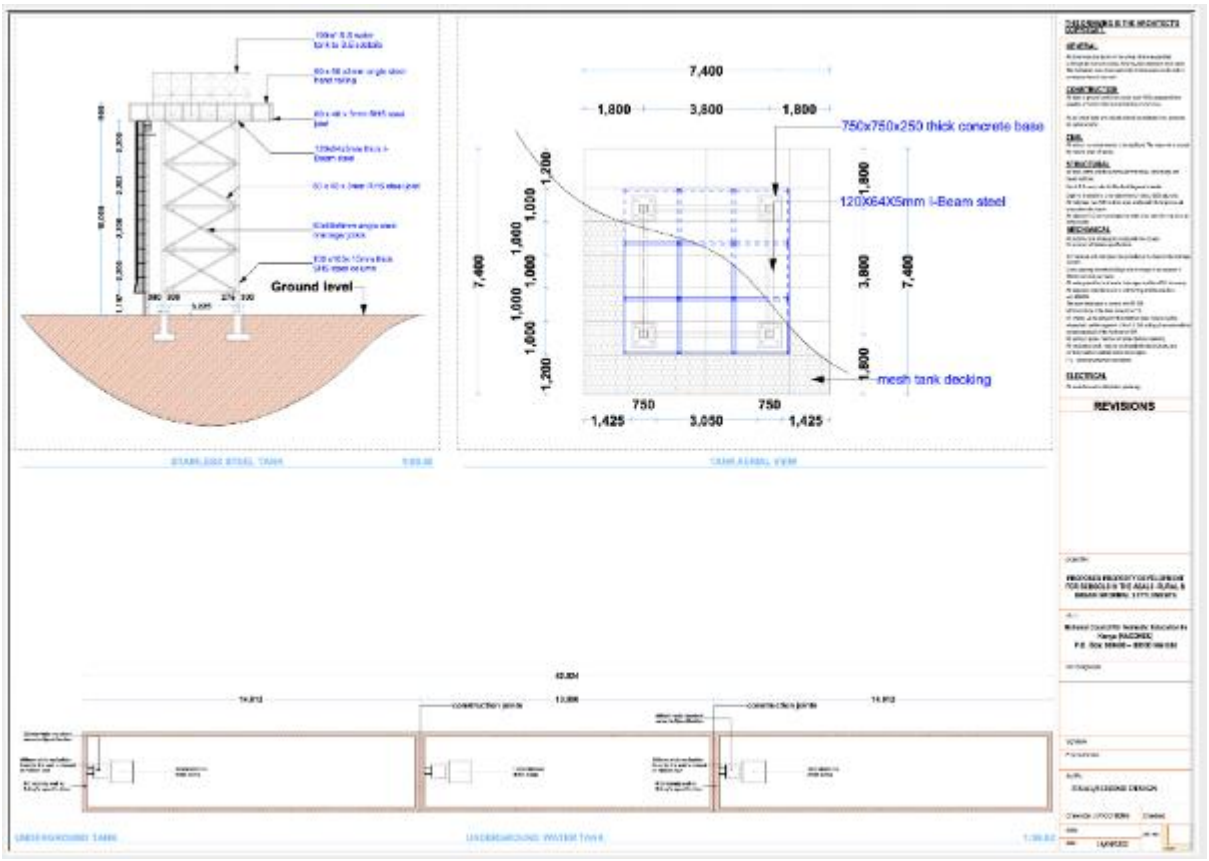
PERIMETER WALL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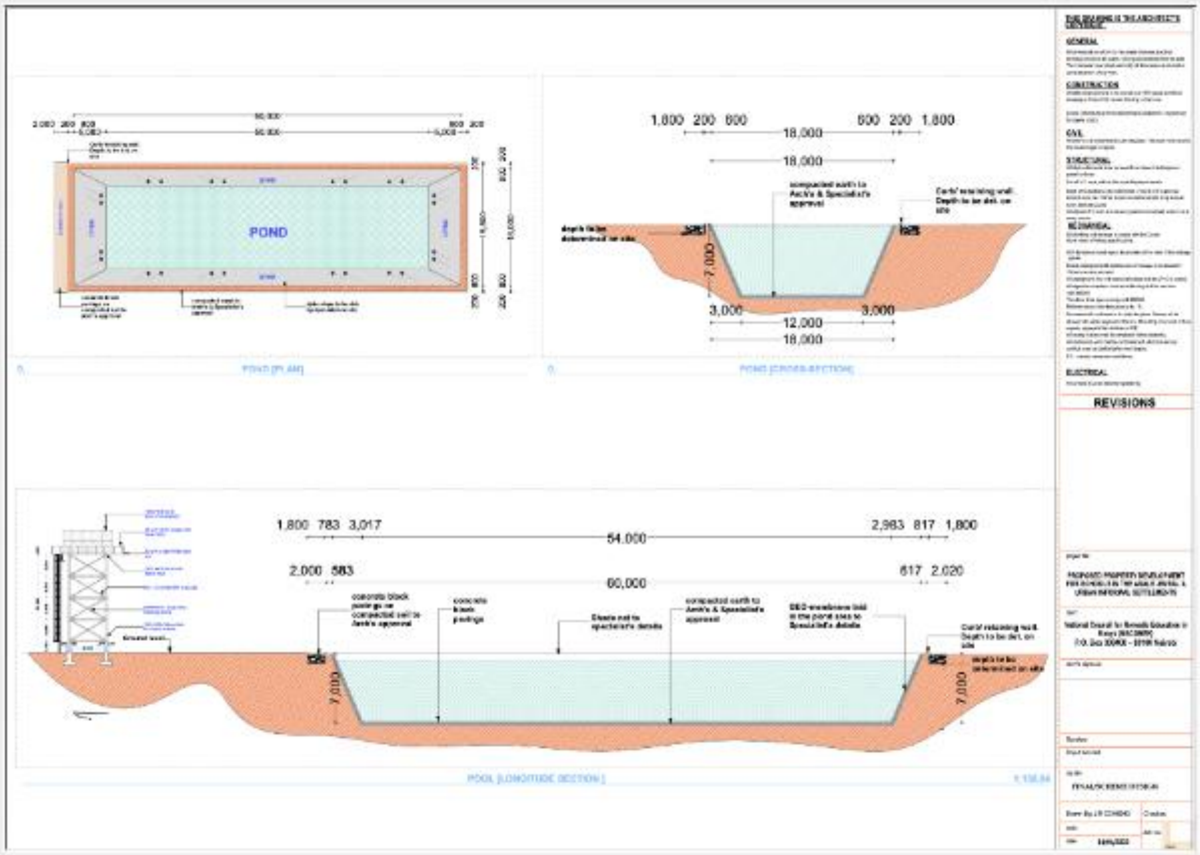
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compacted earth to Arch's & Specialist's approval
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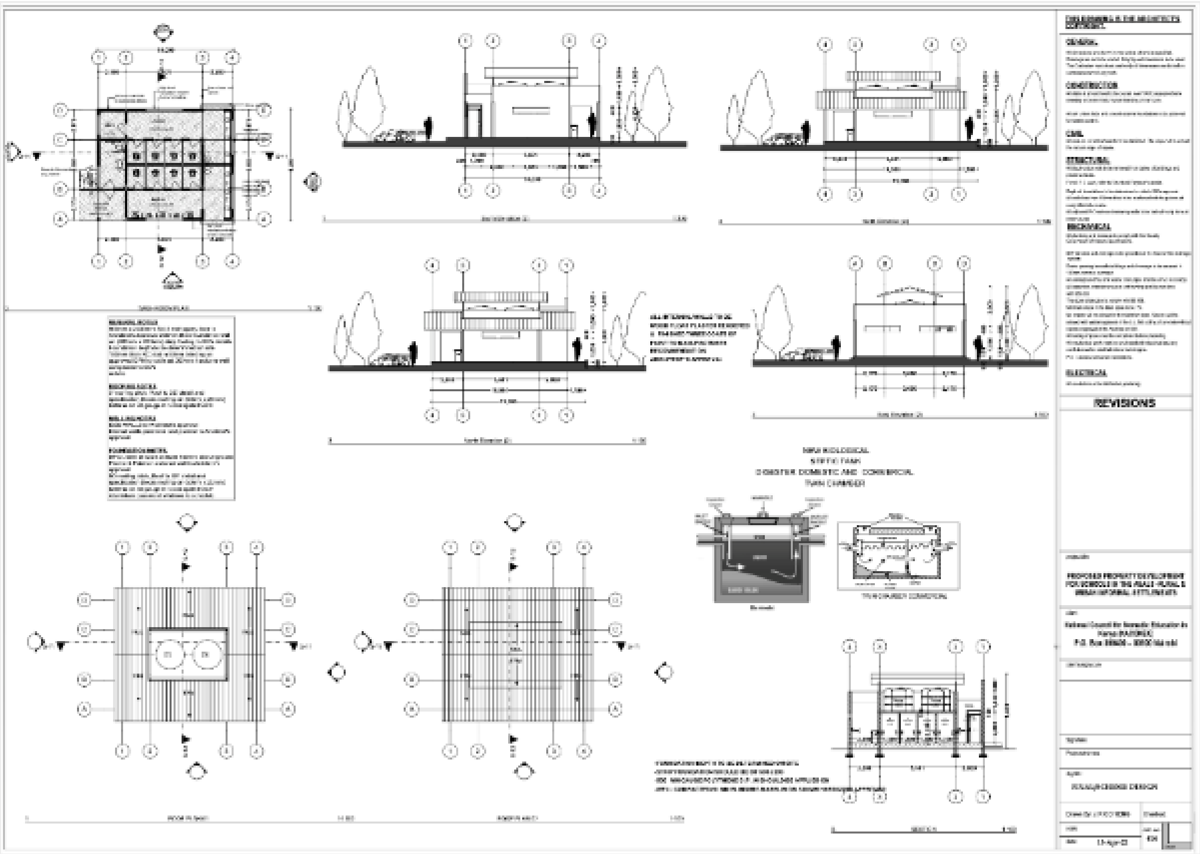
concrete block pavings on compacted soil to Arch's approval
concrete block pavings
Steels mat to specialist's details
GEO-membrane laid in the pond area to Specialist's details
Ground level
depth to be determined on site


REVISIONS

Annex 7: Minutes and Attendance Register of the Consultative Meetings

1. The Kuno site visit-Stakeholder Meeting July 6 2021

MINUTES OF KUNO STAKEHOLDERS MEETING HELD AT KUNO PRIMARY SCHOOL ON 6TH JULY 2021 FROM 2.30 PM TO DISCUSS THE PROPOSED IMPReSED PROJECT

PRESENT

1. NACONEK Team
    a. Alex Oduor – Chairman
    b. Evans Onyango
2. Kuno Primary School Representative
    a. Abdifatah Ali Mohammed – Secretary
3. Youth Leaders (15): See Annex 2.
4. Farm Workers (44): See Annex 2.
5. Community Leaders (15): See Annex 2.
6. Religious Leaders (11): See Annex 2.

APOLOGIES

1. Dorcas Wamalwa
2. Charles Kirui

AGENDA

1. Preliminaries
   1.1 Welcome
   1.2 Apologies
   1.3 Adoption of the Agenda.
   1.4 Declaration of conflict of interest.
2. Communication from the Chair: Highlights on Proposed IMPReSED Project
3. Responses from the participants
4. A.O.B.

Min 1/2021: Preliminaries

1.1 **Welcome**. The meeting was called to order at 2.30 pm by Alex Oduor, a consultant of the National Council for NOMADIC Education in Kenya (NACONEK) on climate smart infrastructure. This meeting was held after a tour of the school compound including the farm. He welcomed the participants to the meeting with appreciation.

1.2 Apologies – Two apologies were recorded; these were from Dorcas Wamalwa and Charles Kirui both being consultants from NACONEK.

1.3 **Adoption of the Agenda** - The Agenda was adopted by Evans Onyango and seconded by Habiba Ali Wathi

1.4 **Declaration of conflict of interest** – There was no conflict of interest declared.

Min 2/2021: Communication from Chair

The Chairman gave highlights on the IMPReSED (Integrated Mechanisms of Poverty Reduction Strategies for Education and Development) project. He reiterated that the project was conceived by NACONEK following a concept note and proposal that they wrote to the African Development Bank AFDB. He said that the proposed project specifically enumerated on the pillars water, food, energy, sustainably and education pillars with a view to contribute in the access, retention, and transition of out of school children in 12 counties of Kenya including those in Balambala constituency where Kuno primary school is located. He expounded on the details of activities for these pillars. Indeed he indicated the activities which were already undertaken during the pilot project and the pending ones which are going to be facilitated by the government of Kenya, Africa Development Bank (AfDB) and other development partners.

The Chairman summarized that the core agenda of the meeting was to discuss the proposed IMPReSED Programme focusing on poverty which is one of the factors that has made it very difficult for families to settle down and to positively contribute in the education of their children. The other factor noted are the tough

conditions for leaners. Kuno is a mixed day-boarding school. The major challenges faced at the school include; scarcity of water for drinking, sanitation and hygiene purposes, fluctuations in adequate provision of food for the learners as well as a steady source of electrical and bio-energy for various uses such as lighting for studies and security as well as cooking.

He listed the activities as follows:

- Water Pillar
  - Atmospheric water generation
  - Riverine borehole
  - Uplands (School) borehole
  - Runoff water harvesting into truncated pyramid pond

- Food Pillar
  - Irrigation of crops, Gliricidia sepium and Sorghum Sudan grass
  - Provision of crop produce for solid food to the Kuno model school and surrounding satellite schools
  - Distribution of fortified porridge by NACONEK
  - Bee keeping for honey
  - Agri-park for value addition of water, food and energy products

- Energy Pillar
  - Use of solar power for pumping water, providing light at night for studying and security
  - Bio-energy production from Gliricidia sepium. This include Briquettes for cooking and feedstock to generate electrical from thermal energy

- Sustainability Pillar
  - Construction of large multi-storage reservoirs to buffer as much water as possible especially for irrigation purposes
  - Installation of silos to preserve crop produce and make them available for lengthy periods of time during the year
  - Adoption of green climate smart infrastructure for school rehabilitation, water management etc

- Education Pillar
  - Introduction of ICT labs
  - Providing practical opportunities for Competency Based Curriculum
  - Creating conducive environment for the learners e.g. Dignity packs, facilities that are responsive to Peoples with disabilities and the marginalized groups.

Based on the presentation above, the Chairman welcomed participants for comments or questions related to social or environmental impacts of the IMPReSED Project.

Min 3/2021: Responses from the participants

The following were reposes from the participants through comments and questions raised on environmental and social impacts.

Question: Qayiba Seikh Mohamed asked about how the IMPReSED project was going to benefit the people of Kuno socially and economically

Response: The Chairman answered that the community will be employed in the school farm for irrigation of crops, Gliricidia and pasture (Sorghum-Sudan grass). They will also be employed in the apiary development. Income generated from these engagements will boost their family status economically as well as knowledge and life skills.

Question: The Headmaster of Kuno school Mr. Abdifatah Ali asked if there's any likelihood of students learning using CBC on matters that are environmental as a study, and if so, how?

Response: The Chairman responded by talking about the biophysical aspects of the project which includes: Gardening, irrigation where the students will have practical exposure on sciences e.g. soils, biology, climate etc. Evans Onyango noted that a Weather Station will be installed at the school compound allowing the pupils to learn about climate.

Question: Shaani Bushane asked: Are there any environmental impact of this project on the community?

Response: Alex answered that Watergen is the one which is likely to produce some negative impact through noise pollution because it will emit below 70 decibels. However, this is still low and cannot affect the community and boarders as they reside more than 100m away. In addition, this will further be mitigated through fencing of the Watergen by enclosing it with iron sheets and Gliricidia hedge.

Question: Khadija Bollow Adon asked: In terms of farming, is there any negative impact to the community and if so, which ones - and how will they be mitigated?

Response: Alex answered by saying that there will be no major negative farm based impacts to the community because conservation farming techniques will be adopted in addition to the use of integrated fertility management solutions with a strong bias to organic fertilizers. In order to reduce soil erosion, there will be planting of vegetative bunds in the farm and the waterways using vertiver grass.

Min 4/2021: A.O.B

The discussions sought for solutions which will contribute to economic sustenance for the community through income generation activities as well as skills and knowledge both inside and outside the school premises. The meeting agreed on the following:

- Community sensitization on the proposed IMPReSED project
- Need for skill development on farming and alternative livelihood sources.
- Home based and external approaches for boosting local resources and financial base.

The Chairman thanks participants for availing time from their busy schedules to attend to this meeting.

The Meeting ended at 5.04pm with a prayer from Abdifatah Ali.

Minutes approved for circulation

Secretary: Abdifatah Ali Mohmed **Date:** 20 July 2021

Chairperson: _Alex R. Oduor. **Date:** 20 July 2021

ANNEX 1: Some photos for the Meeting


IMPRESSED


NATIONAL COUNCIL FOR NOMADIC EDUCATION
IMPRESSED

LIST OF PARTICIPANTS WITH RESPECTIVE ID. NUMBERS

KUNO PRIMARY SCHOOL REPRESENTATIVE

1. Abdifatah Ali Mohammed 25313713

NACONEK TEAM

1. Alex Oduor – Chairman 7860521
2. Evans Onyango 25242118

YOUTH LEADERS

1. Aden Sugow. 24869843
2. Siat Gure Ali. 24369542
3. Gedi Gure Hussein
4. Ali Digale Musa 27244024
5. Gure Isac Bosas
6. Abdi Ali Awod. 11885483
7. Osman Damar Gamadid. 26617091
8. Samaa Yusuf. 21895086
9. Aris Murshid. 31013544
10. Abdi Mahat. 26580586
11. Abdi Rahaman
12. Digale Musa.
13. Arfon Mohamed Aden. 26621132
14. Shaan Bashane Yare. 23022508
15. Qayiba Seikh Mohamed. 24303286
16. Habiba Diis Afey. 31111181

FARM WORKERS

1. Khadija Hussein Noor. 22623434
2. Shaani Bushane Yare. 23022508
3. Batula Ali Omar. 29038838
4. Raha Bashir Mohamed. 29650111
5. Habiba Diis Afey. 31111181
6. Muslima Mohamed Kedhiye. 2103880
7. Karai Dubow Abdullahi. 21464374
8. Mogai Issac Hassan. 27307677
9. Kethiye Abdullahi Kune. 29658642
10. Hawo Aden Nuno. 27953701
11. Arfon Mohamed Aden. 26621132
12. Amina Diis Siyat. 31092586
13. Fatuma Ethow. 31017158
14. Habiba Badid Muse.
15. Zeinab Issack Bosas. 30968517
16. Fatuma Abdi Digale. 1260581
17. Halima Mohamed Saney. 21285586
18. Halima Diriye Matan. 30968276
19. Zeinab Alimed Abdi. 26296161
20. Halima Abaile Sagar. 21453452
21. Habon Farah Buub. 31013675
22. Shaiya Digale Muse. 24866957
23. Habiba Ali Wathi. 13118973
24. Tamima Gure Hussein. 24304780

25. Amina Abdi Marayare. 21466351
26. Shaani Digale Haji. 23483109
27. Zeinab Abdi Abdullahi.
28. Abdullahi Abdile Madow. 0031329
29. Habiba Mohamed Kathiye. 23022490
30. Batula Mohamed Suleiman. 1260597
31. Anis Murshid Abdi. 31013544
32. Elisha Mugendi. 34817287
33. Siyat Gure Ali. 24369542
34. Abdi Mahat. 26580586
35. Owino Dankan. 27813296
36. Benson Amolo. 22651122
37. Shaani Bushane Yare. 23022508
38. Abdi Ahmed Omar. 1260575
39. Samaa Yusuf. 21895086
40. Abdifatah Mohamed Ali. 25313713
41. Fidelis Mwoki Kioko. 35389438
42. Eric Ochieng. 35528496
43. Clifford Mululi. 24631777
44. Samwel Mwakio. 13710844

COMMUNITY LEADERS

1. Khalif Abdi Omar. 0044697
2. Diis Siyat Omar. 0049117
3. Mohamed Heybe Ibrahim. 22623524
4. Mohamed Idu Roble. 8480416
5. Abdi Idhow Abdi. 21500594
6. Amina Abdi Marayare. 21466351
7. Abdi Isaac Bosas. 35700660
8. Murshid Abdi Marayare. 1261516
9. Yusuf Maalim Ibrahim. 8672462
10. Hussein Heibe Ibrahim. 23025180
11. Mohamed Hussein Ahmed. 0048721
12. Rukia Ali Samatar. 31891835
13. Khadija Bollow Adon. 25136784
14. Abdifatah Mohamed Ali. 25313713

RELIGIOUS LEADERS

1. Mohamed Idu Roble. 8480416
2. Abdi Idhow Abdi. 21500594
3. Mohamed Heybe Ibrahim. 22623524
4. Abdi Issac Bosas. 35700660
5. Yusuf Maalim Ibrahim. 8672462
6. Hussein Heibe Ibrahim. 23025180
7. Ahmed Mohmed Idhow. 34026615
8. Ismail Farah Maalim. 24816143
9. Abdulbasir Aden Abdi. 40152968
10. Haret Aden Gamadid. 35110310
11. Abdi Sheikh Jibril

APOLOGIES

3. Dorcas Wamalwa
4. Charles Kirui

2. The Kenya Education Management Institute Technical meeting held on July 26th - 30th 2021

MINUTES OF SCHEDULING OF FEASIBILITY STUDY HELD ON July 26th - 30th 2021 AT THE KENYA EDUCATION MANAGEMENT INSTITUTE.

Agendas

1. Scheduling of the feasibility study
2. Development of the workplan
3. Scheduling tasks

The following schedule was prepared:

Day	Activity
Sunday (afternoon)	Check in
Monday	Presentation, Discussion, & Agreement on feasibility plan Delegation of duties & activities
	Initiation of task execution
Tuesday	Execution of tasks (Continued)
	Discussions of task results
Wednesday	Presentations & discussions
	Reviews & preparation of Presentations
Thursday	Presentations for feasibility plan to the CEO & Deputy CEO
	Travel back

Min. 1/22: Areas of coverage

It was agreed that the feasibility study would take place in twenty counties: 11 ASAL Counties i.e., Turkana, Samburu, Mandera, Wajir, Garissa, Isiolo, Marsabit, Tana River, Narok, Kajiado, Homa Bay (including fishing nomad s); 7 Pockets of Poverty Regions i.e., Kilifi, Nyeri (Kieni), Siaya, Bungoma, Busia, Kiambu (Ndeiya) Machakos (Masinga) and 2 Urban Informal Settlements, (Nairobi and Mombasa)

Min. 2/22: Targets

The targets set were:

a. 300 public primary schools and the surrounding communities with 6 Model, 180 satellite, 124 outlying schools
b. 100,000 outlying households that will ensure 455,000 Out-of-School-Children get education and training

Min. 3/22: Implementation period

The agreed upon implementing Period is between 2022 and 2026.

Min. 4/22: Feasibility study

The feasibility study will be conducted against/ guided by the 4 components agreed up with AfDB i.e., Literature reviews will be done bearing in mind the previous studies conducted by NACONEK including but not limited to:

a. Low-cost boarding schools
b. The APBET report
c. The NIWFESS report Doc
d. Dry dev

Components	Environmental impact	Mitigation measures
1. Dignity pack	Pads and tampons end up in landfills before they break down into micro plastics that pollute oceans, rivers, beaches and contaminate water supply.	Alternatively use the easy to handle, Convenient, Reusable and easy to dispose sanitary pads
2. Classroom reconnaissance	a. Construction noise is a major source of noise pollution. Most of this noise is produced by machinery in site	a. Adhere to any local construction time restrictions and send a letter to neighbors before beginning work to alert

	preparation, demolition, and landscaping. b. Demolition waste disposed of in landfills or through incineration	them to how long the project will last and what to expect. b. Hardware, appliances, and fixtures can be recycled or reused. Brick and concrete can be recycled and used as fill or driveway bedding, and metals and wood are valuable commodities that can be recycled.
3. Install containerized digital resource and surge centers with computers that have access to the cloud and powered by solar	greenhouse gas emissions	Whenever possible, consumers can lower the quality of streaming video quality from high definition to standard. If streaming subscribers lowered the quality of their video, it could reduce monthly greenhouse gas emissions by a huge percentage
4. set up farmer field schools of 50 farmers around each school farm established	Pollution and degradation of soil through use of artificial fertilizers and pesticides.	Use natural methods of weed and pest control as well as natural manure to enhance production

Picture Gallery

Attendance lists

REPUBLIC OF KENYA
MINISTRY OF EDUCATION

F-03-04

KEMI
KENYA EDUCATION MANAGEMENT INSTITUTE

REGISTRATION FORM

DATE 26 July – 30 July 21 ORGANISATION /COURSE ATTENDED NACONEK

S/NO	NAME	P/NO OR I/D NO	MON	TUE	WED	THUR	FRID	E-MAIL ADDRESS	SIGN
1.	Charles Kinui	24640896	✓	✓	✓	✓	✓	charleskinui2 @gmail.com	
2.	Martin Wafula	8344387	✓	✓	✓	✓	✓	Mwafula@ Yahoo.com	
3.	Zainab Mohamed	26330313	✓	✓	✓	✓	✓	Mzainabsaire gmail.com	
4.	Carol Mugoongo	21841482	✓	✓	✓	✓	✓	gmugoongo @gmail.com	
5.	Dorcas Wanjiku	30236661	✓	✓	✓	✓	✓	dorcaswanjiku @gmail.com	
6.	ALEX R. ODUOR	7860521	✓	✓	✓	✓	✓	alexoduor2@gmail.com	
7.	Noel Cheboryot	23076526	✓	✓	✓	✓	✓	noelcbor@gmail.com	Noel
8.	Emus Kyem	7453839	✓	✓	✓	✓	✓	emmykjemen@gmail.com	

KEMI IS ISO 9001:2008 CERTIFIED

REPUBLIC OF KENYA
MINISTRY OF EDUCATION
SCIENCE AND TECHNOLOGY

F-03-02

KEMI
KENYA EDUCATION MANAGEMENT INSTITUTE

NACONEK TEAM

25th JULY 2021 —

S/NO	GUEST NAME	GENDER	NAME OF INSTITUTION	MOBILE NO.	PF/ TSC NO/ ID NO	ROOM NO.	DATE IN	SIGN IN	DATE OUT	SIGN OUT	REMARKS
1	Charles Kimi	M	NACONEK	0723948653	24600896	39	25/7/21	[illegible]	30/7/21	[illegible]	
2	Alex Oduor	m	NACONEK	0717737346	7860921	26	25/7/21	[illegible]	30/7/21	[illegible]	
3	MARTIN WAFULA	M	"	0721 416062	8344387	28	"	[illegible]	30/7/21	[illegible]	
4	DORCAS KAMAU	F	11	0717555476	30236861	40	11	[illegible]	30/7/21	[illegible]	
5	Noel Chebaryot	M	11	0798571000	23075526	26	27/7/21	Noel	30/7/21	Noel	
6											
7											
8											
9											
10											
11											
12											

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3. **The July 26th – 30th, 2021, Naivasha Multi-sectored workshop** (for purposes of introduction meeting with Multi-sectored Government Focal)

MEMBERS- Nomadic Council for Education in Kenya (NACONEK)

1. Harun Yussuf – CEO
2. Emis Njeru – DEPUTY CEO
3. Oscar Mariesco – Sustainable Livelihoods
4. Edwins Saka – M&E
5. Alex Oduro – Climate change
6. Angelina Brant – Programs
7. Charles Kirui – Programs
8. Martin Wafula – Sustainable livelihoods
9. Dorcas Wamalwa – Programs
10. Noel Cheboryot – ICT
11. Zainab Mohamed – Sustainable livelihoods
12. Carol Gatwiri – Programs
13. Evans Onyango - Programs

Micro and Small Enterprise Authority (MSEA)

1. Henry Mwenda Rithaa CEO
2. Edward Karani Director, Infrastructure
3. Evans Lokabel Snr. Ass. Director, Partnerships and Resource Mobilization
4. Mary Chege Chief Legal Officer
5. Kenneth Cheruiyot Kuley Planning and RM Officer
6. Esther Gicheru Head of Communications
7. Moses Thuranira Senior Resource Mobilization Officer
8. Douglas K. Ruiga Chief Admin. Office of CEO
9. Evans Bullut Enterprise Development Officer
10. James Mutegi Executive Driver
11. Shukri Bonaya Security

The National Youth Service (NYS)

1. Mr. Julius K.Thuranira Director Farms
2. Mr. Evans Onderi Legal Officer
3. Mr. Kenneth Guantai Head, Research & Innovation
4. Lilian Nyamu Driver

Ministry of Water & Sanitation and Irrigation – Kenya Water for Schools Project

1. James Yatich

Ministry of Interior and Coordination of National Government – The National Development Implementation and Communication Coordination Cabinet

1. Major Jeremiah Nyakundi Legal Adviser
2. Sally Ngugi Legal Adviser

Ministry of Agriculture Livestock and Fisheries

1. Mr. Francis Nyarimba

Call to order:

The meeting was called to order by Harun Yusuf the chairman **AGENDA**

1. Each partner's profile presentation
2. Presentation of IMPReSED project
3. Identification of IMPReSED partner convergence areas

MIN 1: PARTNERS PROFILE PRESENTATION

MDME. Emis Njeru, deputy CEO NACONEK opened the workshop by introducing NACONEK and its mandate and sharing on the workshop objectives as;

- To share highlights of IMPReSED
- To share institutional mandates, areas of operations, and current activities

- To make presentations of Case contexts
- To undertake Group discussions on how to bridge the technical gaps/how to reap maximum productivity from one another
- To clearly outline feasibility planning

Eng. Edward Karani, Director Infrastructure, MSEA, Micro and Small Enterprises Authority introduced MSEA, its establishment and Mandate and highlight of areas of operation and MSEAs success stories so far.

This was followed by Mr. James Yatich who introduced ministry of water areas of interventions and his role particularly in Kenya water for schools' project.

In the afternoon Mr. John Thuranira highlighted the National Youth Service. Its establishment, NYS core mandate, there areas of operations in the country and the impact NYS has had this far in the country.

Francis Nyarimba introduced to the workshop the ministry of agriculture, and highlight of the Kenya Agricultural and Livestock Research Organization whose mandate as a think tank in agriculture and livestock research will come in handy in providing IMPReSED with up to date intervention that will yield success in the areas of operation.

And lastly, Major Jeremiah Nyakundi from the National Development Implementation & Communication and Coordination Cabinet guided the workshop on the 2010 system of governance that was adopted by Kenya highlighting the thin line between county government and national government and a highlight of the framework for coordination and implementation of national government development programme and projects

MIN 2: PRESENTATION ON IMPReSED PROJECT

Mr. Charles Kirui highlighted the preparation for project appraisal in the month of September by AfDB and a guideline of TELOS – Technical Economic Legal Operations Scheduling tool that will help in carrying out the feasibility study.

Ms. Angelina Brant presented on the IMPReSED project, its interventions and expected outcomes and goals to the workshop teams. This was then followed by a presentation of the KUNO Primary Pilot School that gave birth to IMPReSED by Mr. Evans Oduor

The workshop was then introduced to two sites already identified for IMPReSED interventions. Mr. Oscar Mariesco undertook the workshop through the Bungoma site while Ms. Angelina Brant presented on the Kilifi site.

Martin Wafula gave a highlight on the proposed plan for food production.

Later in the afternoon the workshop was divided into three IMPReSED pillars working groups i.e. Food Production, Water Interventions, and Agri-processing were the working groups were to identify the areas of convergence and apply the TELOS tool in readiness for feasibility study.

MIN 3: IMPReSED PARTNER CONVERGENCE AREAS

A presentation of working group notes was done which highlighted very well areas of convergence on Water, Food, Agri-Processing pillars. Mr. Harun Yusuf, CEO NACONEK offered his closing remarks with a highlight of a need for partners MoU signings and mapped out key areas of engagement. All these have been highlighted in the workshop report.

MDME. Emis Njeru, Deputy CEO NACONEK closed the workshop.

National Council for Nomadic Education in Kenya

NACONEK

IMPReSSED FEASIBILITY REPORT WRITING - DESK REVIEW WORKSHOP HELD AT MASADA HOTEL IN NAIVASHA FROM 6TH TO 10 TH SEPTEMBER, 2021

ATTENDANCE LIST

S/No.	Name	Organization	Designation	Email address	Signature Monday 6th	Tuesday 7	Wednesday 8th	Thursday 9th	Friday 10th
1.	FAITH MOCHECHE MAKORI	NACONEK	INTERN PROCUREMENT	thechemakori@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
2.	Noel Chaborgeb	NACONEK	ICT	noelkbore@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
3.	ALEX ODUOR	NACONEK	CONSULTANT	alexoduor72@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
4.	BEATRICE KANULI	MOALF&C (MoA)	CAPACITY BUILDING P. OFFICER	lwembia@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
5.	Kenneth Guantai	NYS	Research & Innovation	guantai.kenneth@gmail.com	[signature]	[signature]	[signature]		

No.	Name	Organization	Designation	Email address	Signature Monday 6th	Tuesday 7th	Wednesday 8th	Thursday 9th	Friday 10th
6.	KENNETH CHEWIYOT	MUSEA	PRMO	kenzck@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
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10.	DAMARIS MBOI		CONSULTANT	damarisnbo@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
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No.	Name	Organization	Designation	Email address	Signature				
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14.	Emis Yer	NACONEK	DDE	emmyjere@gmail	[signature]	[signature]	[signature]	[signature]	
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16.	Charles Kinui	NACONEK	CONSULTANT	charleskinui@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
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19.	Limbasi Bartholomew	NACONEK	DDE	wanikinas1939@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
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21.	Oscar Mamotha	NACONEK	Consultant	oscar@...co.ke					

No.	Name	Organization	Designation	Email address	Signature				
					Monday 6th	Tuesday 7th	Wednesday 8th	Thursday 9th	Friday 10th
22.	Fatuma Ali	Naconek	Asst admin	fatmarkins@gmail.com	[signature]	[signature]	[signature]	[signature]	[signature]
23.	ZAKARIA ISMAIL Hem	NACONEK	DATA & ICT	Zakaria@naconek...	[signature]	[signature]	[signature]		
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26.	Sally M Nyagi	MOIENGC	Legal	...	[signature]	[signature]	[signature]		
27.	ALEX R. ODUOR	NACONEK	Consultant	alexoduor2@gmail	[signature]	[signature]	[signature]		
28.	EDWARD KARANI	MSEA	Dr. IDT	karani.ngu@gmail.com	[signature]	[signature]	[signature]		
29.	MARTIN WAFULA	NACONEK	Consultant	martinwafula2007@yahoo.com					
	Julius Thurana	NYS	D/Fas	Julius.Thurana@nys.go.ke	[signature]	[signature]	[signature]	[signature]	

NATIONAL COUNCIL FOR NOMADIC EDUCATION IN KENYA

NACONEK

NACONEK - GOK PARTNERSHIP ENGAGEMENT WORKSHOP SCHEDULED FOR MASADA HOTEL, NAIVASHA;

DATE: 16TH AUGUST, 2021

No.	Name	Designation	Institution	Telephone no.	Email	Signature
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3.	DORCAS WAMALWA	BRAND-COMM CONSULTANT.	NACONEK	0717555476	dorwamalwa@gmail.com	
4.	Zainab Mohamed	Consultant	NACONEK	0717590249.	msahiansa7@gmail.com	
5.	Evans Onderi	LEGAL OFFICER	NYS	0723637638	orengeonderi@yahoo.com	
6.	Julius K- Thuranira	Direct. Farms	NYS	0721890055	Julius.thuranira@nys.go.ke	
7.	MARY CHEGE- MSEA	CEO-MSEA	MSEA	0710602571	marychegeadvocate@gmail.com	
8.	EDWARD KARANI	DIRECTOR-IDTI	MSEA	0725701304	enjiru@msea.go.ke	
9.	Kenneth Guantai	Head, Research & Innovation	NYS	0725783332	guantai.kennedy83@gmail.com	
10.	Noel Cheboryot	IT CONSULTANT	NACONEK	0798571000	Noelkbor@gmail.com	

No.	Name	Designation	Institution	Telephone no.	Email	Signature
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13.	James W. YATICH	Director	Ministry of Water Sanitation & Irrigation	0721177084	jkeyatich@yahoo.com	
14.	Ennis Njeru	D.D.E / ADE	NACONEK	0722868381	emmynjeru.en@gmail.com	
15.	Sally Ngugi	Legal	Moi cng	0720315321	ndusally@gmail.com	
16.	Evans Oduor	Consultant	NACONEK	0745276167	pixinitistudios@gmail.com	
17.	Evans Bullut	EDO	MSEA	0721649671	evanskip.bullut@gmail.com	
18.	Esther Gicheru	C.C.O	MSEA	0712131854	shikugicheru9@gmail.com	
19.	EVANS LOKABEL	SNR ASS. DIRECTOR PRM	MSEA	0722605604	elavalel@gmail.com	
20.	Francis Nyambane	AD/LR	MoALF&C	0722481890	nyambanega.f2014@gmail.com	
21.	MOSES THURANIRA	SNR Resource Mobilization	MSEA	0727-869-210	thuraniramoses@gmail.com	
22.	Angeline Jnadse	Lead Consultant	NACONEK	0780887319	angelinajnadase@gmail.com	
23.	Haroun Mohammed	SECRETARY/CEO	NACONEK	0799-177-3	harounwo@gmail.com	
24.	Jeremiah Nyakundi	L/A	MOICNG	0711496018	jgnyakundi@gmail.com	
25.	ZAKARIA ISMAIL	DATA ANALYST	NACONEK	0722329643	zakaria@naconek.ke	

4. **September 6th – 13th 2021. Multi-sectored Workshop in Naivasha:** a follow up meeting with Multi-sectored Government Focal Group

Minutes of the Multi-sectored Workshop held in in Naivasha from September 6th – 13th 2021

ATTENDEES

1. NACONEK
   1) Alex Oduor
   2) Angelina Brantt
   3) Charlse Kirui
   4) Dorcas Wamalwa
   5) Martin Wafula
   6) Zainab Mohammed
2. Micro and Small Enterprise Authority (MSEA)
   1) Henry Mwenda Rithaa CEO
   2) Edward Karani Director, Infrastructure
   3) Evans Lokabel Snr. Ass. Director, Partnerships and Resource Mobilization
   4) Mary Chege Chief Legal Officer
   5) Kenneth Cheruiyot Kuley Planning and RM Officer
   6) Esther Gicheru Head of Communications
   7) Moses Thuranira Senior Resource Mobilization Officer
   8) Douglas K. Ruiga Chief Admin. Office of CEO
   9) Evans Bullut Enterprise Development Officer
   10) James Mutegi Executive Driver
   11) Shukri Bonaya Security
3. The National Youth Service (NYS)
   1) Mr. Julius K.Thuranira Director Farms
   2) Mr. Evans Onderi Legal Officer
   3) Mr. Kenneth Guantai Head, Research & Innovation
   4) Lilian Nyamu Driver
4. Ministry of Water & Sanitation and Irrigation – Kenya Water for Schools Project
   1) James Yatich
5. Ministry of Interior and Coordination of National Government – The National Development Implementation and Communication Coordination Cabinet
   1) Major Jeremiah Nyakundi Legal Adviser
   2) Sally Ngugi Legal Adviser
6. Ministry of Agriculture Livestock and Fisheries
   3) Mr. Francis Nyarimba

Minute: 1/09/2021: Arid & semi-arid lands-ASALS, Pockets of Poverty areas-PoPs and Urban Informal settlements-UIS

It was agreed that the Pockets of Poverty regions should be changed to be referred to as Semi-Arid Lands.

Minute: 2/09/2021: Geographic Information systems and remote sensing:

A GIS&RS expert was invited to the meeting, who will work on the Mapping of the arid and Semi-Arid and present all the sites characterization maps.

Minute: 3/09/2021 Site Characterization;

We need to add a column on thematic areas covered in the project, that is Education, Social economic, Bio physical and Infrastructure.

Minute: 4/09/2021 Numbers of Out of school children-OOSC:

It was resolved that we need to ensure that the number of out of school children in the target area matches that of the main document, Angelina is to share the final document to guide on this.

Minute: 5/09/2021 TVET institutions mapping.

This should be connected to the Identification of economic activity per region. E.g. in Kilifi, Briquettes, energy saving jikos. Market base school. Impact to reduce school expenditure.

Minute: 6/09/2021 PMP;
Angelina and Martine to work on this and share.
Minute: 7/09/2021 Mapping of Water for schools
Mr. Yatich to establish if the schools are solarized, fenced and greenhouse availability in order for an informed decision on climate smart investments to implemented
Minute: 8/09/2021 Financial Flow;
Information on in-kind contributions in table form from all stakeholders be done. A Business breakdown for the super model sites; How to commercialize and market linkages. Projections on incomes from School farms, academic advantage, livestock.
AoBs
Letters of commitment from all partners. (Legal)
All environmental safety-nets be elaborated for purposes of adherence

5. 1st October – 30th November 2021 Kimwanga-Bungoma

MINUTES OF THE HOMEGROWN SOLUTIONS, FOOD AND NUTRITION UNIT 1ST OCTOBER TO 30TH NOVEMBER 2021

These minutes summarize the key resolutions reached through activities implemented under NACONEKs Home-grown, food, nutrition and sustainable development unit during the implementing period (i.e. 1st October to 31st November 2021- of fiscal year 2021-2022 (FY22).

Activities included:

1. A series of Planning and consultative meetings were held between the NACONEK team and stakeholders in line with roll-out the implementation of the home-grown and sustainable development solutions in Bungoma County as part of the feasibility for the implementation of the IMPReSED project, in line with the following objectives

They included:

1. Hold a planning meeting with lead farmers under CREADIS

2. Holding a briefing and subsequent planning meeting with MSEA Kimwanga processing facility board members and subsequently lead farmers under MSEA.

3. Hosting a Technoserve meeting at the 3 facilities in Bungoma as one on the partners coming on-board to support the porridge for schools technically and financially

4. Holding a planning meeting with lead farmers under Leadership of Nzoia Sugar Factory: for purposes of the commercial Producers/Nzoia Sugar Factory For Soya Farming Established

5. Participating in the national deworming exercise in Bungoma County.

6. We also participated in the IMPReSED programme environmental impact assessment report. We were given the tasks of writing the project overview, goal, specific objectives, components and main activities.

7. Holding a series of consultative meetings with INCREDION, Technoserve, Jetlak, MSEA and Technoserve

8. Conducting a feasibility study and developing a report IMPReSED programme pilot activities in Bungoma County.

9. Developing and MSEA and NACONEK MoU partnership to operationalize 12 Constituency Industrial Development Centers (CIDPs) to achieve sustainable development.

10. Operationalizing the MSEA facility in Bungoma operationalized to produce fortified composite porridge flour for the NACONEK porridge programme and to support Home grown solutions.

RESOLUTIONS

1) NACONEK through UNIBRAIN proceeds to roll-out activities in target locations Bungoma.

The key activities to include commissioning the 3 processing plants (sifted flour, orange-fleshed sweet potatoes-OFSP and the extruder based MSEA processing plant. All the 3 facilities are up and running, test trials have been run, sample products tested in laboratories and found fit.

Several technical aspects that are a pre-requisite for seamless operation are in progress

(i) Carrying out a feasibility study for the Bungoma based activities and writing a comprehensive report.

(ii) Developing a 3 month work plan with a detailed work breakdown and budget that Unibrain wishes to implement in Bungoma County. This was in an effort to streamline work and activities flowing collaboration with other partners

(iii) Developing a comprehensive environmental and Social implementation and mitigation plan-ESIA-MP

(iv) Ensure that all aspects of the raw materials are ready for production in the manufacturing plant. This includes ensuring that the raw materials are in a state ready for continuous or batch product processing and all quality parameters are met.

(v) Develop the ready-to-drink porridge product formulation in conjunction with NACONEK and in-line with the customer's requirements is achieved, Ensuring successful product trials and subsequent commercial production of the product while ensuring quality standards are met in relation to manufacture of the product.

(vi) Avail of packaging material design as well as ensuring the final packaging material is produced for NACONEK school-feeding concept.

(vii) Develop a definition of all the activities that will define the governance of the Project post-implementation for the actualization by NACONEK

(viii) Develop a definition of all the required regulatory approvals required to enable the product transition from concept to consumable.

All these have come out of a series of consultations

2) Hold a planning meeting with lead farmers under CREADIS

The meeting resulted in; Orange Fleshed Sweet Potato-OFSP Farming among Communities in Bungoma County Established. A meeting 50 lead farmers, drawn from various locations in Bungoma County was held. This farmer's work under the CREADIS OFSP farming network of 12,000 farmers. During this meeting, a briefing was done and the following decisions arrived

1. That the lead farmers will mobilize their respective farmers to grow orange fleshed sweet potatoes
2. CREADIS will organize the supply of vines
3. NACONEK through the home grown solutions, nutrition and food security will support the ground coordination activities

3) Holding a briefing and subsequent planning meeting with MSEA Kimwanga processing facility board members and subsequently lead farmers under MSEA.

This was towards SOYA Farming among Communities in Bungoma County Established. This was done at (i) MSEA Bungoma county board level and (ii) with one of the MSEA-Bungoma chapter group based in Mt Elgon. The feasibility of setting up activities was clear from the feedback obtained from the group leadership and members are in a state of readiness to plant Soya and ensure continuous supply

4) Holding a planning meeting with lead farmers under Leadership of Nzoia Sugar Factory: for purposes of the commercial Producers/Nzoia Sugar Factory and the National youth service farm in Turbo nucleus For Soya Farming

The supply of Soya beans for purposes of processing shall be drawn from strategic stocks held by Nzioa Sugar Factory and National youth service farm in Turbo nucleus, besides farmer groups sub-contracted by the NACONEK-homegrown solutions unit in Bungoma County such as (MSEA farmer groups, various farmers drawn from parents of learners around various target schools.

Towards this end, the UNIBRAIN team had a series of consultative and planning meetings with the leadership of Nzioa Sugar Factory, The National youth service farm in Turbo nucleus, and farmer groups in preparation for growing steady supplies

5) Environmental impacts and safety-nets

As part of the processes leading to the award of the IMPReSED Program, an environmental and social impact assessment was necessary.

The Social Economic Impact Assessment baseline identify and evaluates the potential intended and unintended socio-economic consequences both positive and negative of the IMPReSED programme on the lives and circumstances of people, their families and their communities within the target projects in the target locations.

Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.

(i) To establish clear procedures and processes for the environmental management.

(ii) Specify appropriate roles and responsibilities in environmental impacts monitoring, and outline the necessary reporting procedures, for managing any environmental and social concerns that may arise.

(iii) To determine the training, capacity building and technical assistance needed by community members to successfully implement the Environmental and Social Management Plans (ESMPs).

Overall it was noted that outputs of this project are positive and will translate into multiple positive economic and social outputs/ outcomes such as:

a) Improved environmental management through good agricultural production practices
b) Reduced pollution through integrated pest management systems.
c) Increased agricultural production/ productivity for the small-holder farmers
d) Increased marketing opportunities through the Kimwanga processing plant
e) Reduced post-harvest losses of agricultural produce and subsequent increased food and nutritional security;
f) Improved household and community incomes hence improved living standards, food security and improved nutrition through diversified food supplies.
g) Increased employment opportunities both directly and indirectly by people employed during the development works as well as those who will be employed in agro-processing, marketing, sale of farm inputs, etc.
h) Improved agricultural production skills through training and extension services coordinated by NACONEK and other stakeholders
i) Increased environmental management skills through capacity building of farmers and other community members involved in the project

Some of the Soya farming based activities listed that are likely to have an adverse impact on the environment as well as the proposed practices that will mitigate against adverse environmental impacts are listed below

Adopting Soil conservation measures like;

- Planting in counters bands
- Planting green hedges around farms
- Not farming at least 3 meters away from river banks
- Timely spreading out of compost/ farmyard manure on farms
- Practicing crop rotation

- Use of Muguna plant to replenish and recharge the soils during the off season period
- Practicing crop rotation
- Use of regenerative Agricultural practices
- Use of crop rotation practices
- strict application of climate agriculture
- Adherence to water extraction policies/processes
- Adherence to environmental conservation measures
- Adoption of Integrated past management systems

As a general rule the members of the community undertake to maintain climate smart agriculture practices

Attendance List

	Name of Member/participant	Name of Group	Sex	County	Sub-County	Ward	Phone no.
1	Alibina Wanami	ComeKnow	F	Bungoma	Kabuchai	Chwele	716819410
2	Alice N Kisongochi	ComeKnow	F	Bungoma	Kabuchai	Chwele	704843660
3	Isaiah Sululu	Maafuli	M	Bungoma	Kabuchai	Chwele	716985158
4	Jackson Simiyu	Maafuli	M	Bungoma	Kabuchai	Chwele	726323600
5	Elijah Wanyonyi	Maafuli	M	Bungoma	Kabuchai	Chwele	718278952
6	Teresa N Juma	Maafuli	F	Bungoma	Kabuchai	Chwele	713974670
7	Josephine Barasa	Amka	F	Bungoma	Cheptais	Cheskaki	701618708
8	Loice Kapule	Amka	F	Bungoma	Cheptais	Cheskaki	0
9	Philis Tamnai	Amka	F	Bungoma	Cheptais	Cheskaki	790976606
1	Ben Biketi	Amka	M	Bungoma	Cheptais	Cheskaki	746863976
1	Dina Chepkatrat	Chemichemi	F	Bungoma	Cheptais	Cheskaki	745134342
1	Lilian Chebrot	Amka	F	Bungoma	Cheptais	Cheskaki	702488739
1	Godfrey Sifuna	Kubilia	M	Bungoma	Kabuchai	Mukuyuni	714363850
1	Margaret Wamalwa	Kubilia	F	Bungoma	Kabuchai	Mukuyuni	790970167
1	Holiness Mutua	Kubilia	F	Bungoma	Kabuchai	Mukuyuni	707589700
1	Rosemary Ndukuyu	Kubilia	F	Bungoma	Kabuchai	Mukuyuni	714568237
1	Hellen Wamalwa	Kubilia	F	Bungoma	Kabuchai	Mukuyuni	72282485
1	Margaret Makau	Kubilia	F	Bungoma	Kabuchai	Mukuyuni	720847849
1	Charles Chemao	Namubila CBO	M	Bungoma	Sirisia	Lwandanyi	712009669
2	Penina Barasa	Namubila CBO	F	Bungoma	Sirisia	Lwandanyi	720141730
2	Rodgers Pepela	Namubila CBO	M	Bungoma	Sirisia	Lwandanyi	711178380
2	Philis Chebonei	Namubila CBO	F	Bungoma	Sirisia	Lwandanyi	714989954
2	Patrick Ngeywo	Namubila CBO	M	Bungoma	Sirisia	Lwandanyi	703772336
2	Agnes Mamati	Namubila CBO	F	Bungoma	Sirisia	Lwandanyi	706773310
2	Patrick Mwasame	NADEFA	M	Bungoma	Sirisia	Lwandanyi	722946932
2	Rose Wanyonyi	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	717755546
2	Justine Wafula	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	701678096
2	Judith Nangekhe	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	717427162
2	Betty Mudoga	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	725376196
3	Rose Khashindi	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	723467442
3	Miriam Wanyonyi	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	706773929
3	Lilian Wanaswa	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	708678390
3	Felister Namukuru	Khamulati w/g	F	Bungoma	Kimilili	Kimilili	716369916
3	Beatrice Sakwa	Salvama	F	Bungoma	Webuye East	Mihuu	719674191
3	Joyce Nafula	Salvama	F	Bungoma	Webuye East	Mihuu	700642875
3	Rabecca Wafula	Salvama	F	Bungoma	Webuye East	Mihuu	708653049

3	Alice N. Wafula	Tumaini	F	Bungoma	Webuye East	Mihuu	720405358
3	Carol Wamalwa	Tumaini	F	Bungoma	Webuye East	Mihuu	710141869
3	Dinah Simiyu	Tumaini	F	Bungoma	Webuye East	Mihuu	0
4	Martha Odinga	Tumaini	F	Bungoma	Webuye East	Mihuu	720587595
4	Violet W. Wafula	Salvama	F	Bungoma	Webuye East	Mihuu	704216781
4	Pauline N. Wafula	Salvama	F	Bungoma	Webuye East	Mihuu	727598737
4	Christine Simiyu	Khafweli	F	Bungoma	Bumula	S.Bukusu	706297460
4	Dorcas Otonda	Khafweli	F	Bungoma	Bumula	S.Bukusu	702017430
4	Jane Nyongesa	Khafweli	F	Bungoma	Bumula	S.Bukusu	707405360
4	Imeda Luketelo	Khafweli	F	Bungoma	Bumula	S.Bukusu	713416250
4	Nancy Juma	Khafweli	F	Bungoma	Bumula	S.Bukusu	702882380
4	Metrine Wafula	Khafweli	F	Bungoma	Bumula	S.Bukusu	725834555
4	Everlyne Khaemba	Khafweli	F	Bungoma	Bumula	S.Bukusu	700415522
5	Violet Wekesa	Khafweli	F	Bungoma	Bumula	S.Bukusu	718075552
5	Carolyne N Wanyama	Khafweli	F	Bungoma	Bumula	S.Bukusu	714903045
5	Jackyne Souka	Khafweli	F	Bungoma	Bumula	S.Bukusu	798616293
5	Josephine Muhindi	Sitabicha CHV	F	Bungoma	Webuye East	Ndivisi	721783571
5	Maximilla Waswa	Sitabicha CHV	F	Bungoma	Webuye East	Ndivisi	718069124
5	Felistas Natembeya	Katumi	F	Bungoma	Webuye East	Ndivisi	721206125
5	Farida Wanyonyi	Sitabicha CHV	F	Bungoma	Webuye East	Ndivisi	710344693
5	Agnetta Esilaba	Sitabicha CHV	F	Bungoma	Webuye East	Ndivisi	724179363
5	Everlyne Wambulwa	Sitabicha CHV	F	Bungoma	Webuye East	Ndivisi	741077276
5	Jentrix Kakai	Sitabicha CHV	F	Bungoma	Webuye East	Ndivisi	726849575
6	Violet Wabwile	Katumi	F	Bungoma	Webuye East	Ndivisi	748957710
6	MaryStella Wekesa	Katumi	F	Bungoma	Webuye East	Ndivisi	723523401
6	Metrine Welaluche	Smart Stewards	F	Bungoma	Bumula	Khasoko	716573652
6	Zipporah Simiyu	Smart Stewards	F	Bungoma	Bumula	Khasoko	713358512
6	Lilian Wabwire	Smart Stewards	F	Bungoma	Bumula	Khasoko	790149864
6	Maureen Masinde	Smart Stewards	F	Bungoma	Bumula	Khasoko	711780953
6	Theresa Wambani	Smart Stewards	F	Bungoma	Bumula	Khasoko	713992169
6	Beatrice Opili	Smart Stewards	F	Bungoma	Bumula	Khasoko	722341894
6	Linet Manali	Smart Stewards	F	Bungoma	Bumula	Khasoko	705898119
6	Naomi Shiundu	Smart Stewards	F	Bungoma	Bumula	Khasoko	705167382
7	Alice Masai	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	768800120
7	Janet Chesang	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	0
7	Emily Kotet	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	712614571

7	Winrose Cherot	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	745634084
7	Lucy Cherotich	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	727494416
7	Emily Tengam	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	759223171
7	Phylis Naibei	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	0
7	Linet Chepkemoi	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	790052061
7	Nancy Machas	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	703729712
7	Nancy Cherotich	Kipsiriri	F	Bungoma	Mt Elgon	Elgon	716931999
8	Hellen Wabomba	Matulo SHG	F	Bungoma	Webuye West	Matulo	723738216
8	John Wabomba	Matulo SHG	M	Bungoma	Webuye West	Matulo	790729433
8	Joseph Wafula	Matulo SHG	M	Bungoma	Webuye West	Matulo	700009679
8	Pauline Njakusi	Matulo SHG	F	Bungoma	Webuye West	Matulo	701654851
8	Isaac Juma	Matulo SHG	M	Bungoma	Webuye West	Matulo	700842871
8	Hellen Oloo	Matulo SHG	F	Bungoma	Webuye West	Matulo	728772997
8	Robai Wekesa	Matulo SHG	F	Bungoma	Webuye West	Matulo	729060656
8	Beatrice Wanyonyi	Matulo SHG	F	Bungoma	Webuye West	Matulo	717367127
8	Martha Adayo	Matulo SHG	F	Bungoma	Webuye West	Matulo	710819579
8	Sylvia Walucho	Matulo SHG	F	Bungoma	Webuye West	Matulo	727924017
9	Gentrix Nekesa	Nangara WG	F	Bungoma	Kanduyi	Khalaba	715736965
9	Eusebia Sitati	Nangara WG	M	Bungoma	Kanduyi	Khalaba	703725235
9	Pamela Alwanga	Nangara WG	F	Bungoma	Kanduyi	Khalaba	707540340
9	Redempta Namalwa	Nangara WG	F	Bungoma	Kanduyi	Khalaba	716904660
9	Jerida Moraa	Nangara WG	F	Bungoma	Kanduyi	Khalaba	716904660
9	Karen Nyabuku	Nangara WG	F	Bungoma	Kanduyi	Khalaba	717314687
9	Wilkister Banikister	Nangara WG	F	Bungoma	Kanduyi	Khalaba	711295751
9	Gentrix Wabinda	Nangara WG	F	Bungoma	Kanduyi	Khalaba	719626962
9	Mary Naliaka	Nangara WG	F	Bungoma	Kanduyi	Khalaba	0
9	Naomi Nafuna	Nangara WG	F	Bungoma	Kanduyi	Khalaba	792900656
1	Teresa Muganda	Marina	F	Bungoma	Sirisia	Malakisi/S.Kulisiru	714046904
1	Gadwell Simiyu	Marina	M	Bungoma	Sirisia	Malakisi/S.Kulisiru	74720709
1	Isaac Biketi	Marina	M	Bungoma	Sirisia	Malakisi/S.Kulisiru	719702245
1	Wanyonyi Margaret	Marina	F	Bungoma	Sirisia	Malakisi/S.Kulisiru	715519870
1	Lydia Kuny	Marina	F	Bungoma	Sirisia	Malakisi/S.Kulisiru	706401585
1	Fredrick Marani	Marina	M	Bungoma	Sirisia	Malakisi/S.Kulisiru	703130118
1	Moses SIKOLO	Marina	M	Bungoma	Sirisia	Malakisi/S.Kulisiru	719803902
1	Wycliffe Koi	Marina	M	Bungoma	Sirisia	Malakisi/S.Kulisiru	713691482

1	Wilson Mrefu	Marina	M	Bungoma	Sirisia	Malakisi/S.Kulisiru	748592717
1	Rachel Sungu	Marina	F	Bungoma	Sirisia	Malakisi/S.Kulisiru	743206709
1	Musilikwa Khaita	Marina	M	Bungoma	Sirisia	Malakisi/S.Kulisiru	726418641
1	Dorice Wasike	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	717596564
1	Susan Abadada	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	729491637
1	Everlyne Nabwile	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	799061384
1	Justine Nanjala	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	702203476
1	Yvonne Barasa	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	706359962
1	Gladys Wasike	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	707534622
1	Nancy Juma	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	714655498
1	Penina Nyongesa	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	757651656
1	Eveline Wafula	Utu Bora WG	F	Bungoma	Kimilili	Kamukuywa	707954488
1	Pauline N Busaka	Agri-Business	F	Bungoma	Bumula	Bumula	796056331
1	Wycliffe Khaemba	Werusia	M	Bungoma	Bumula	Bumula	741702574
1	Phostine Nekesa	Werusia	F	Bungoma	Bumula	Bumula	799472436
1	Maurice Kukali	Werusia	M	Bungoma	Bumula	Bumula	727936391
1	Robert W Fred	Werusia	M	Bungoma	Bumula	Bumula	724995152
1	Meshack Wwasiliwa	Werusia	M	Bungoma	Bumula	Bumula	723652675
1	Rose Fungututi	Werusia	F	Bungoma	Bumula	Bumula	702000398
1	Salome A Ambuka	Agri-Business	F	Bungoma	Bumula	Bumula	700604159
1	Mary Barasa	Agri-Business	F	Bungoma	Bumula	Bumula	790921158
1	Centrine N .Simiyu	Makalibo	F	Bungoma	Bumula	Kimaeti	759644827
1	Judith N Okumu	Makalibo	F	Bungoma	Bumula	Kimaeti	712449345
1	Rabecca Naswa	Makalibo	F	Bungoma	Bumula	Kimaeti	702460867
1	Elizabeth Simiyu	Makalibo	F	Bungoma	Bumula	Kimaeti	791416016
1	Christine Wabwile	Makalibo	F	Bungoma	Bumula	Kimaeti	702564856
1	Christine Simiyu	Makalibo	F	Bungoma	Bumula	Kimaeti	705795982
1	Mary Nekesa	Makalibo	F	Bungoma	Bumula	Kimaeti	715578465
1	Emily Wamalwa	Makalibo	F	Bungoma	Bumula	Kimaeti	701725055
1	Lydia Wamalwa	Makalibo	F	Bungoma	Bumula	Kimaeti	796602335
1	Florence Kaizani	Makalibo	F	Bungoma	Bumula	Kimaeti	724670783
1	Emily Makhakha	Makalibo	F	Bungoma	Bumula	Kimaeti	720300611
1	Adelaide Naulikha	Makalibo	F	Bungoma	Bumula	Kimaeti	716442602
1	Josephine M Nyongesa	Wekhaka	F	Bungoma	Webuye West	Sitikho	700726602
1	Janet N Juma	Wekhaka	F	Bungoma	Webuye West	Sitikho	711526170
1	Josephine N Wanjala	Wekhaka	F	Bungoma	Webuye West	Sitikho	716493745
1	Violet N Wanjala	Wekhaka	F	Bungoma	Webuye West	Sitikho	708241660
1	Alice N Wepukhulu	Wekhaka	F	Bungoma	Webuye West	Sitikho	706262763
1	Naomi N Simatwa	Wekhaka	F	Bungoma	Webuye West	Sitikho	705067460

1	Susan N Wanyonyi	Wekhaka	F	Bungoma	Webuye West	Sitikho	711991634
1	Susy Kukali	Wekhaka	F	Bungoma	Webuye West	Sitikho	712486687
1	Phanice Wafula	Wekhaka	F	Bungoma	Webuye West	Sitikho	0
1	Beatrice Adema	Wekhaka	F	Bungoma	Webuye West	Sitikho	718445902
1	Caren N Wafula	Wekhaka	F	Bungoma	Webuye West	Sitikho	706130180
1	Catherine N Kisaka	Wekhaka	F	Bungoma	Webuye West	Sitikho	706211967
1	Aggrey W Wafula	Wekhaka	M	Bungoma	Webuye West	Sitikho	723606607
1	Emmnuel Fwamba	Bukembe Vision	M	Bungoma	Kanduyi	Bukembe East	711553910
1	Lazarus Wanjala	Winners Youth	M	Bungoma	Kanduyi	Bukembe East	718298150
1	Joyce Khisa	Bukembe Vision	F	Bungoma	Kanduyi	Bukembe East	799146281
1	Leah Flakhanya	Winners Youth	F	Bungoma	Kanduyi	Bukembe East	795789609
1	Colletta N Wanyama	Bukembe Vision	F	Bungoma	Kanduyi	Bukembe East	704852709
1	Celestine Wafula	Bukembe Vision	F	Bungoma	Kanduyi	Bukembe East	796886276
1	Hellen Barasa	Bukembe Vision	F	Bungoma	Kanduyi	Bukembe East	704446223
1	Rhoda Amasa	Bukembe Vision	F	Bungoma	Kanduyi	Bukembe East	726739871
1	Gladys Nalianya	Bukembe Vision	F	Bungoma	Kanduyi	Bukembe East	797789942
1	Janet Mukhongo	Winners Youth	F	Bungoma	Kanduyi	Bukembe East	718237565
1	Lilian Mwiruka	Winners Youth	F	Bungoma	Kanduyi	Bukembe East	713235552
1	Brian Wafula	Winners Youth	M	Bungoma	Kanduyi	Bukembe East	740357030

6. Kilifi Community leaders Meeting 18th October 2021

MINUTES OF KILIFI COMMUNITY LEADERS
18th OCTOBER 2021, SOKOKE FOREST

Sustainable Livelihoods and Communities to Support Basic Education:

Agenda

1. **Introduce IMPRESSED programme Components**
2. **Listen to needs and concerns of community**
3. **Link priorities of communities to IMPRESSED interventions**
4. **Discuss any social and environmental impacts**

Members Present

The meeting drew six Friends of Sukoke Forest Association Leaders representing 300 communities surrounding Sukoke Forest, Sukoke Forest park rangers, Community gender expert, NACONEK consultants and community representative to discuss community and education challenges of Kilifi North. This included a brief site visit of the conservation park, the adjacent village and a school site.

Min. 1/18/21 Link priorities of communities to IMPRESSED Interventions

The members were brought on board on what IMPRESSED programme components entailed and how it aligned to the needs and priorities of the community. This also included discussion on how the IMPRESSED activities could respond to the socio economic and environmental challenges that are barriers to education in the region. Key areas discussed:

1. Community Mobilization
2. Sustainable livelihood programs for communities
3. Youth Skills development
4. Basic infrastructure of Water, food, Energy at a school level to support households who are facing multidimensional poverty and the impacts of climate change.

Comments from the team
Friends Sokoke Forest Leaders:

- Appreciated the sustainable context specific livelihood programs for the community for water, food security. They emphasized managing the environment is challenging when the community has depended on it to subsist. Being able to provide, trees and fodder at a community level will create positive change for the environment.

Gender Expert

- Emphasized how much an academic advantage programme is needed to support the women and girls access to education and basic household needs. Creating an enabling environment where girls and women can thrive is key and being able to economically empower them with skills and seed capital will be transformative.

Park Rangers

- Proposed how youth skills and entrepreneurship training will support their young rangers programme as they continue their work as volunteers if they also are able to support themselves through a group start up, the programme for environmental support will be sustainable.

Photos

KILIFI COMMUNITY LEADERS

18th OCTOBER 2021, SOKOKE FOREST
Sign Sheet

No	Name	Organization / Designation	Number	Email
1		Community Leader		
2		Community Leader		
3		Community Leader		
4		Community Leader		
5		Community Leader		
6		Community Leader		
7		Community Gender Expert		
8		Sukoke Ranger		
9		Sukoke Ranger		
10	Sam Jinadasa	IDSL – Development Consultant		
11	Angelina Brant	NACONEK – Consultant		

7. Kangemi Community Stakeholder Meeting 4th November 2021

MINUTES OF KANGEMI COMMUNITY
4th NOVEMBER 2021, KANGEMI RESOURCE CENTER
Sustainable Livelihoods and Communities to Support Basic Education:
Agenda

5. **Introduce IMPRESSED programme Components**
6. **Listen to needs and concerns of community**
7. **Link priorities of communities to IMPRESSED interventions**
8. **Discuss any social and environmental impacts**

Members Present
Naconek Consultants, Kangemi Resource Center Director, Community Gender Expert, Urban Green Plate Farmer Director, Waste Management Expert, Nairobi Young Professionals from Future Shapers Start-ups and CBOS, Kangemi Community Leaders including Community Teachers, Community Farmers, and Community Parents

Min. 1/04/21 Link priorities of communities to IMPRESSED Interventions

The members were brought on board on what IMPRESSED programme components entailed and how it aligned to the needs and priorities of the community. This also included discussion on how the IMPRESSED activities could respond to the socio economic and environmental challenges that are barriers to education in the region. Key areas discussed:

5. Community Mobilization
6. Sustainable livelihood programs for communities
7. Youth Skills development
8. Basic infrastructure of Water, food, Energy at a school level to support households who are facing multidimensional poverty and the impacts of climate change.

Comments from the team
Kangemi Community Leaders:

- Emphasized Food security is a key need to engage communities to retain children in learning centers. Provision of clean water to reduce disease and absenteeism. It is important that there are better government services for the community to thrive socio economically. Urban Community Farms are good for the environment and will support community socioeconomic stability.

Community Gender Expert

- Sensitization of girls and community leaders and teachers is key. Having access to sanitary pads and having a system to ensure that either they are reusable or that they can be disposed of properly is something that must be taken into account.

Young Professionals Group

- Promoting skilling training for youth and sustainable ways to advocate and promote entrepreneurship and financing to complete education is key. The urban farming plan could support this in a sustainable way. We have located some greenhouses not far from here that can be a community farm, that can also support youth skills training and mentorship.

Photos

KANGEMI SCHOOL MEETING Thursday 2 pm, November 4, 2021

	Name	Title	School Name	Email	Phone Number
1	Lucy Nyanga	Head Teacher	El-Shaddai [illegible]	Elshaddai @gmail.com	0723048563
2	Patrick Aluda	Head Teacher	Kanyeroca [illegible]	[illegible] @yahoo.com	0720456680
3	[illegible]	Head Teacher	Kangemi SDA	[illegible]	0713965981
4	Evans Onchiri	Head Teacher	Carevans School	carevansschool@gmail	0722529212
5	James Mwangi	[illegible]	Kanyoroha S.	[illegible]	0724177995
6	Derrick Mugisa	Headteacher	Light Rays Centre	lightrayscentreschool@gmail	0727359619
7	Ketrah Aloisa	Head Teacher	Little Winners	[illegible] @gmail.com	0727119366
8	Reuben Makokha	Head Teacher	Joyland School	joyland@gmail.c	0726242348
9	Caleb Owino	[illegible]	Pama Academy	[illegible]@gmail.com	0700159860
10	Joseph B. Simiyu	Head Teacher	Kangemi Youth Centre	[illegible] yahoo.com	0720555029
11	Faith Moraa	Head Teacher	King's Glory	[illegible] @gmail	0728091964
12	[illegible]	Director	Karee Community	Youth-[illegible]	0720730371
	Susan Ngoge	Director	Living Faith	[illegible]@gmail	0722887673

KANGEMI SCHOOL MEETING Thursday 2 pm, November 4, 2021

	Name	Title	School Name	Email	Phone Number
1	Florence Kinyanga	Head Teacher	Mid-Lane	florenceKinyanga @gmail.com	0726448252
2	Obed Ayodi	HT	Kaptagat edu.	Kaptagateducation@gmail.com	0746781460
3	Ruth Wanjiru Karri	Headteacher	The Main Dollars Academy School	[illegible]academy@gmail.com	0724711914
4	Asnath Sidika	Head Teacher	[illegible]	[illegible]	0700795848
5	Priscilla Nyamburua	Headteacher	Stev-in Junior	juniosteving yahoo.com	0721883202
6	Hildagard Khasenye	Head teacher	Omala Academy	Khildagard@yahoo.com	0726154461
7	Christine Shisanya	Headteacher	Sweet Angels	[illegible]	0725398443
8	Chris Okwara	Head teacher	Patience	[illegible]	0722854345
9	Ludgard Lumbasi	Headteacher	God is Able	ludgardlumbasi@gmail.com	0726436582
10	Manyonyi Purity	DHT	Young Angels	[illegible]@gmail	0758912085
11	Mukokha Kevin	Headteacher	Hila preparatory	[illegible]@gmail	0724673680
12	George Oruko	Teacher	Wisdomme	georgeoruko[illegible]@gmail	0727519511

KANGEMI SCHOOL MEETING Thursday 2 pm, November 4, 2021

	Name	Title	School Name	Email	Phone Number
1	Leonida M. Nyasani	H/Teacher	Victory Blessed [illegible]	[illegible]	0706214968
2	Jane W Githua	H/Teacher	The red hill ed centre	wjane003@gmail.com	0721776684
3	Susan Mbaire	Director	Joyhill Education C	mbawasue@gmail.com	0725785826
4	Benjamin Indeche	Director	Evergreen Ed Cen	indechebenjamin@gmail.com	0724650499
5	Karumbe Ngotho	Director	Joy Beginners	joybeginners@gmail.com	[illegible]
6	David Simiyu	Teacher	Venus O School	[illegible]	0700901346
7	Janet [illegible]	Director	[illegible] C.E.C	[illegible]	0725023810
8	Edith Wanjiru	Director	Brinier Sch	[illegible]	0720261031
9	Basilia Karimi	Director	Humble Beginners	[illegible]	0722454280
10	Rose W. Ngure	Director	Newpurpose Shekenah Glory sch	[illegible]@gmail.com	0722370891
11	Nelius Nyambura	Director	Mystic Rose	[illegible]	0724813566
12	Immaculate [illegible]	Director	Bethel Com.D	[illegible]	0725577698

KANGEMI SCHOOL MEETING Thursday 2 pm, November 4, 2021

	Name	Title	School Name	Email	Phone Number
1	Lavine Achieng	Teacher	Five star academy	[illegible]@gmail.com	0704886149
2	Tamnah Mwangi	H/T	Young Foundation Academy	[illegible]	0721926244
3	Christine Chisanya	H/T	Sweet Angels	[illegible]	0725398443
4	Hilda Khasenye	H/T	Umoja Academy	[illegible]@ya.com	0725154461
5	Priscilla Nyambura	H/T	Stev-in Junior	juniorsteving@yahoo	0721883207
6	Evelyn Kimani	H/T	Evemon Educ Centre	evemonschools@gmail.com	0725473943
7	Winniecate Karimi	H/T	Alfa Educ Centre	alfa@gmail.com	0710203806
8	Consolata Njugua	A H/T.	Faith Cathedral Integrity		0725798151
9	James Ingabe	H/T	The Moving Star	[illegible]	0725106698
10	Milton Muriithi	Director	Mwalimu Pry.	[illegible]@gmail.com	0721408079
11	Maximilla Aleyo	Teacher	Marvel J. educ centre		0792613236
12	Selpher Weche	H/Teacher	Prudence Education Centre	[illegible]@gmail	0722154407
	Ann Kibbi	Admin	Eutychus Academy	[illegible]@gmail	0714419140

KANGEMI SCHOOL MEETING Thursday 2 pm, November 4, 2021

	Name	Title	School Name	Email	Phone Number
1	WYCLIFFE MUKABWA	DIRECTOR	NEW AGE EDUC. Cent.	Wycliffemukabwa@gmail.com	0723641993
2	C. S. MACHARIA	DIRECTOR	NGAO SOCIETY SCHOOL	[illegible]	0721179795
3	Mercy Wanjiku	Teacher	Metameta [illegible]	metameta@gmail	0746505522
4	IRENE KAMURI	DIRECTOR	BLESSED LINA	[illegible]@gmail	0726554067
5	MARY MACHARIA	DIRECTOR	MARGA ED. C	Margaeducation@yahoo	0722556767
6	Jacklyne Khalandi	DIRECTOR	YOUNG TALENTS	Jacklyne T8@ [illegible]	0727766965
7	Jane Muthoni	Director	Nairobi Hill	Chargedjane@gmail.com	072025211 9
8	Justus Kimeu	Director	Star of wonder	Sweeschool@gmail	0717 495 894
9	SUSAN N SURE	H/TEACHER	KOGERO/SUNNY SHINE	Susan [illegible]	0723775918
10	PATRICK MURIMI	DIRECTOR	PROSPERITY TUTOR CENTRE	Patrickmurimi96@gmail.com	0797245220
11	OLANDO WAGER	DIRECTOR	BETHANY JOY SCHOOL	Wagerolando@yahoo.com	0723826501
12	FRANCIS ASIKOYA	D/HEAD TEACHER	PETALS ED. CENTRE	francisasikoya83@gmail.com	0719373154
	IRENE NJOKI	DIRECTOR	SHINNY STAR	Njoki kiyo@gmail.com	0712258508

8. Samburu Community Women 8th /9th December 2021, White Tank

MINUTES OF SAMBURU COMMUNITY WOMEN
8th/9th DECEMBER 2021, WHITE TANK
Sustainable Livelihoods and Communities to Support Basic Education:
Agenda

9. **Introduce IMPRESSED programme Components**
10. **Listen to needs and concerns of community**
11. **Link priorities of communities to IMPRESSED interventions**
12. **Discuss any social and environmental impacts**

Members Present
The meeting included the participation of 100 Samburu Community Women, 6 school representatives, Segera Mission representatives, Indigenous Women Leader, Community Gender Expert, NACONEK consultants, Community Chiefs and upper primary school girl learners.

Min. 1/18/21 Link priorities of communities to IMPRESSED Interventions

The members were brought on board on what IMPRESSED programme components entailed and how it aligned to the needs and priorities of the community. This also included discussion on how the IMPRESSED activities could respond to the socio economic and environmental challenges that are barriers to education in the region. Key areas discussed:

9. Community Mobilization
10. Sustainable livelihood programs for communities
11. Youth Skills development
12. Basic infrastructure of Water, food, Energy at a school level to support households who are facing multidimensional poverty and the impacts of climate change.

Comments from the team
Samburu Community Women:

- Appreciated skills development and the need to bring in environmentally friendly infrastructure. Access to trees and fodder will directly impact how they interact with tree cutting and firewood usage. They now need to walk far to access firewood. Water storage is a big need. Micro loans will increase their socio-economic resilience.

Community Gender Expert

- Emphasized continued community mobilization and conversations for sustainability and to support the needs of the girl-child by bringing the whole community together boys and men included. FGM awareness and advocacy for social impact is key.

Indigenous Women Leader

- Appreciated the Sustainable Livelihood components to have access to environmental safe solutions at home for WASH, Food and Energy. Emphasized the need to have access to micro loans.

Segera Mission Representative

- Emphasis on water solutions, if these communities don't have water solutions which includes access, storage and usage it is difficult to ensure the programme is sustainable.

Photos


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SAMBURU COMMUNITY WOMEN 8th/9th DECEMBER 2021, WHITE TANK

PARTICIPANT LIST

NO	NAMES	WOMEN GROUP	ID NUMBER
51	MARTHA RANA.	WENDANI MBOGOINI	10876847.
52	EMILY LEKIARANI	SEGERA MEYEI	
53	MARGRET MESHAMI	SEGERA MEYEI	26305381
54	SIYIEKU LOLKALEPI	WENDANI MBOGOINI	26527230
55	FAITH LENKEUA.	WENDANI MBOGOINI	
56	PAULINE LERUMA.	SEGERA MEYEI	
57	ESTHER NOCHOKOLEI	SEGERA MEYEI	23857476
58	LOTITANGO OSMAN.	SEGERA MEYEI	4345275
59	NONTARE SILANGE	SEGERA MEYEI	22925851
60	JANE KARIMI	WENDANI MBOGOINI	23137570
61	ELIZABETH IKOYEN.	WENDANI MBOGOINI	7362147.
62	ELEN NARO	WENDANI MBOGOINI	11895283
63	ESTHER KIOPIRE.	SEGERA MEYEI.	26536245.
64			

SAMBURU COMMUNITY WOMEN
8th/9th DECEMBER 2021, WHITE TANK

PARTICIPANT LIST

NO	NAMES	WOMEN GROUP	ID NUMBER	TELEPHONE NUMBER
1	NOWANA LEKONTINGA	ENDANA NASHULA		0714722307
2	NASI LEKONINGA.	ENDANA NASHULA		0797889666
3	ROSE LELUATA.	ENDANA NASHULA	33766863	0705196973
4	SEKODARI LEPAID	ENDANA NASHULA.	.	0791508192
5	NOWUNYA LALAMPA	ENDANA NASHULA		0111229519
6	SEMPERUA LALAMPA.	ENDANA NASHULA		0701561468
7	FLORENCE LEKARSIA	ENDANA NASHULA	30867694	0701755625
8	NABULU LELAMBA.	ENDANA NASHULA	6185003	0792131863
9	NTILATIE LEMIWGANI	ENDANA NASHULA	11894512	0112503415
10	NPITASI LESENGEI	ENDANA NASHULA		
11	NBALANIA LESUDA.	ENDANA NASHULA		
12	DANIEL LEKONINGA.	ENDANA NASHULA.	2924216	0700454006
13	NGAVA LERUATA	ENDANA NASHULA.	28915421	0712050177
14	KOYELEI LALAMPAA.	ENDANA NASHULA.	26369834	0115236661
15	JOSEPHINE LENAMAITA.	ENDANA NASHULA.	23246629	0717028271
16	TOYES LELUATA	ENDANA NASHULA.	13875373	0792972256
17	NTARIRIN LEPAKAIYO	ENDANA NASHULA.	27168823	0722492417
18	SANIYA LELUATA.	ENDANA NASHULA	33811556	0727732125.
19	NAMOSI LEMARAMBA	ENDANA NASHULA.	13868055	0742044689
20	TORONIKA LEMARAMBA	ENDANA NASHULA.	26220965	0768054429
21	LUCIA KILU	ENDANA NASHULA.	27163636	
22	RAPANGEI RANTEKO	ENDANA NASHULA	11419328	
23	MANGESIAN LEMUSIE	ENDANA NASHULA.	5163251	
24	SELAU LEKAMAI	ENDANA NASHULA.	5164450	
25	NANYTARE MUGO	ENDANA NASHULA.	4349850	

9. 14th February 2022-Webinar with Ministry of Health

MINUTES OF MINISTRY OF HEALTH 14th FEBRURAY 2022, WEBINAR
Sustainable Livelihoods and Communities to Support Basic Education and Health:
Agenda

13. **Introduce IMPRESSED programme Components**
14. **Listen to needs and concerns of health and nutrition in communities and schools**
15. **Link priorities of health communities to IMPRESSED interventions**
16. **Discuss any social and environmental impacts**

Members Present
The webinar dialogue drew in participants from the Department of Primary Healthcare, School Health Coordinator, Health and socio-economic county consultants, UNFPA representatives, youth start-ups in health and WASH, Nutrition experts and NACONEK consultants.

Min. 1/18/21 Link priorities of communities to IMPRESSED Interventions

The members were brought on board on what IMPRESSED programme components entailed and how it aligned to the needs and priorities of the community. This also included discussion on how the IMPRESSED activities could respond to the socio economic and environmental challenges that are barriers to education in the region. Key areas discussed:

13. Community Mobilization
14. Sustainable livelihood programs for communities
15. Youth Skills development
16. Basic infrastructure of Water, food, Energy at a school level to support households who are facing multidimensional poverty and the impacts of climate change.

Comments from the team
Dr Salim Hussein, Head of Department of Primary Healthcare, MOH:

- Emphasized connecting schools and communities to community health workers programme will be key to assist in access to UHC. Preventative healthcare through the water food energy nexus is key.

Mr. Alex Matua, School Health Coordinator MOH

- Appreciated seeing alignment of efforts for school health and how to leverage efforts to reduce duplication

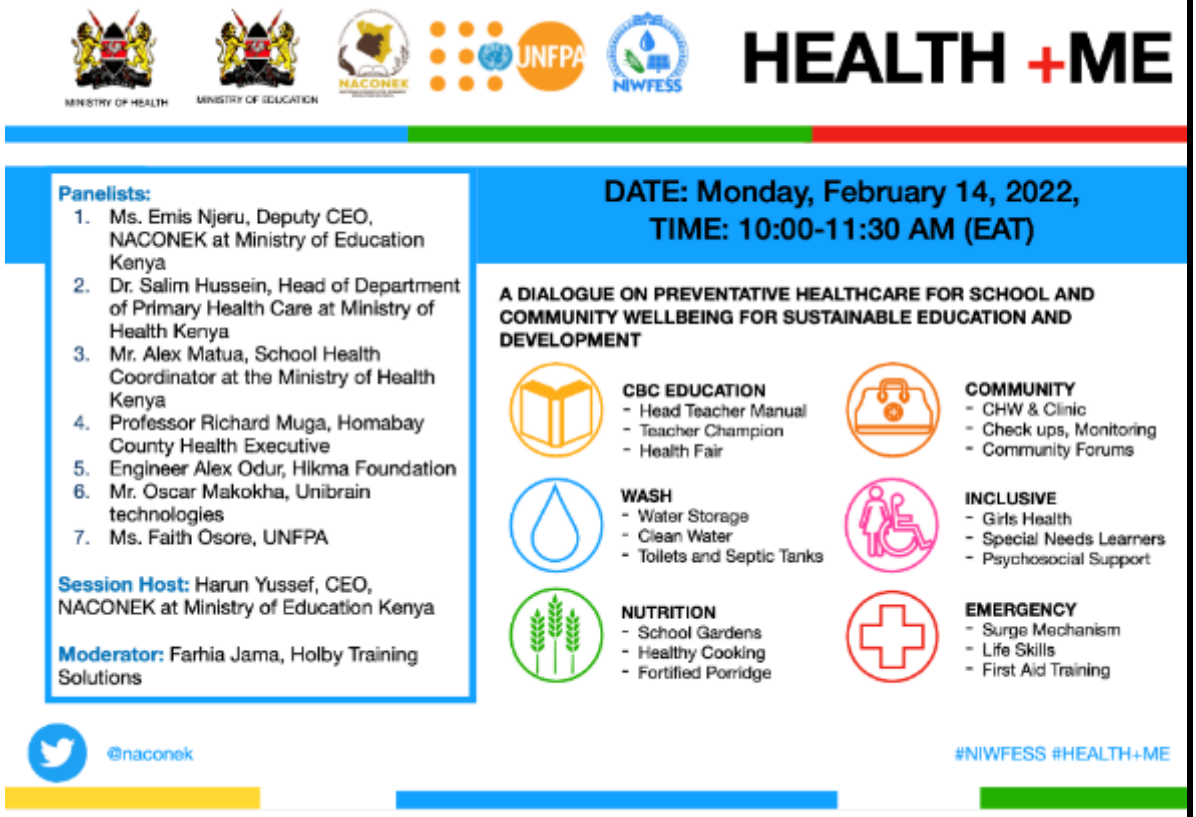
Professor Richard Muga

- Emphasized using poverty tool for tracking socio-economic changes and fluctuations.

UNFPA representative

- Emphasized the need to ensure access to sanitary pads and community sensitization to ensure sustainability of MHM for school girls.

Photos



MINISTRY OF HEALTH
14th FEBRURAY 2022, WEBINAR
Virtual Sign Sheet

Name	Organization	Position	Email
Ms Faith Osore	**UNFPA**	**Coordinator**	**osore@unfpa.org**
Alex Mutua	**School Health, MOH**	**Coordinator**	amutua789@gmail.com
Dr. Salim Hussein	**MOH**	**Head of Department of Primary Healthcare**	**slmlhssn@gmail.com**
Emis Njeru	**NACONEK, MOE**	**Deputy CEO**	**emmynjeru.en@gmail.c**
Professor Richard Muga	**Homa Bay County Health Executive**	**Expert**	**drmuga@yahoo.com**
Alex Oduor	**NACONEK**	**Consultant**	**alexoduorr2@gmail.con**
Angelina Brant	**NAOCNEK**	**Consultant**	**angelinajinadasa@gmai**

10. CONSULTATION FOR IMPRESED PROJECT ONLINE MEETING March 10th, 2022 (INPUT FROM THE ONLINE PARTICIPANTS)

Date: 10 March 2022 through Google Teams: 10am – 11.30am

Questions & Comments

1. **Dr. Chris Galgalo**
   - The IMPReSED Project especially in Component 1 on Access should incorporate aspects:
     i. Security, long distances covered by learners to school;
     ii. Gender disparities – especially biasness against the girl child;
     iii. Teacher shortages especially in the ASAL region which needs to be addressed by the Programme;
     iv. Negative cultural practices e.g. FGM
     v. Displacement of people with vulnerable cultures e.g. Hunters and Gatherers
   - Curriculum should be available and its content should encompass acceptability and adaptability aspects by school and community members.
   - In the ASAL regions, there are teacher shortages which needs to be addressed by the Programme.
   - There is need to develop and undertake a baseline survey on cattle and fishing nomads, pastoralists, Urban slums as well as hunters and gatherers in order to wholistically address their settlements and cultural / livelihood challenges they encounter.
   - There is total marginalization regarding admission of students from marginalized communities who have attained the requisite grade C to access Teacher Training Colleges. In the last exams, 85,000 from the marginalized communities (ASAL) attained grade C but only 35,000 were admitted. This calls for policy advocacy and reviews, especially article 56 of the constitution.
   - A lot of emphasis should be given to access before we address quality issues, otherwise, whom shall we be talking to if there are very few or no learners in schools?
   - There is need to identify and map out locations of urban slums so as to address pertinent issues that are rampant in these areas.
2. **Harry Thuku**
   - Comments on Component 1 regarding Access should incorporate aspects:
     i. The Programme should Include provision of Psycho-social support and counseling support
     ii. Link Out-of-school Children with Teacher Support Mechanism;
     iii. Identification of Out-of-school Children
   - Comments on Component 3 regarding Skill Development should incorporate aspects:
     i. Challenges to the barriers of employment for TVET graduates
     ii. Address TVET Education with a view to link it to the private sector
   - Curriculum should be available and its content should encompass acceptability and adaptability aspects by school and community members.
   - In the ASAL regions, there are teacher shortages which needs to be addressed by the Programme.
3. **Galgalo Ali Guracha**
   - Questions / Comments on Component 1:
     i. How can access for learners to schools be increased in ECDE centres?
     ii. What is keeping learners out of school include challenges such as radicalization, drug abuse and FGM. All these should boldly be addressed in Component 1.
   - Comments on Component 3 regarding Skill Development should incorporate aspects:

i. We have four (4) NGOs who are engaged on matters pertaining to access component. They may collaborate in this IMPReSED programme. They include: USDA, Mercy Corps and VSO.

4. Patricia Makau

- Comments on Component 3:
  - i. Generally, the IMPReSED programme proposal is very impressive.
  - ii. We also have our own experiences on access to education for OOSC of ages 10 to 19 years, VTCs and entrepreneurship programmes. We are willing to share these experiences for the IMPReSED programme.
  - iii. However, we have the following challenges in VTCs that may need to be captured and addressed by the IMPReSED programme:

1. Isiolo has very few VTCs
2. The VTCs are wholly populated by boys as no girls have gone there.
3. Currently, the VTCs curriculum do not seem to address the needs of learners.
4. Isiolo is a vast county and therefore distance to VTCs are far, these exposes learners going there to insecurities. Unfortunately, there are no boarding facilities for residential accommodation.
5. There is need to address the curriculum in a bid to develop entrepreurship certification

- Comments on Component 4:
  - i. I am IMPReSED with component 4 on sustainability.
  - ii. For the issue on sustainability to be realized, it's important to compile and synthesize data and circumstantial evidence d=gathered from the ground.
  - iii. There is need to focus on how sustainability can be enhanced especially in regard to food production

5. Salome Wenyaa

- Comments on Component 1:
  - i. I support the idea that it's best to give top priority to issues on access challenges before addressing quality issues.
- Comments on Component 3:
  - i. We have challenges of APBET institutions. How best can APBET challenges be addressed in Nairobi?

6. Summary on cross cutting issues

- There is need to conduct joint feasibility studies with partners when the programme commences
- Lessons from partners experiences should be collated and incorporated in IMPReSED programme development. These includes success stories from NIWFESS pilot projects in Kuno, Bungoma et.al.
- The programme should include policy advocacy especially for marginalized communities

No.	Name	Organization	REMARKS
1.	Galgalo Ali Guracha	Director- directorate of Vocational Training County Government of Isiolo	We are working with partners to: - increase enrolment in VTCs, -increase courses, mentorship in VTCs, - establish more VTCs -Establish innovation hubs and grants and startup capital All these to connect our youth to a world of opportunities.
2.	Wenyaa Salome	Regional director Quality Assurance & Standards (MoE)	We need to focus on access to leave no child behind. NACONEK with other stakeholders did Mapping of APBETS institutions

			through the exercise and did not cover all the schools.
3.	Joyce Amuga	NACONEK	We can carry out literacy campaigns. I am suggesting multi- grade teaching skills to be one of the areas to be considered CBC requires that parents be involved in the education of their children yet most of the parents in ASAL are not literate
4.	Patricia Makau	VSO Kenya	We need to appreciate we have so many children who are out of school and can't fit I the formal primary education and cater for their needs

LIST OF ONLINE PARTICIPANTS

NO.	PARTICIPANTS	ORGANIZATION	CONTACT DETAILS
1.	Harun Yussuf	CEO-NACONEK	harunyussuf2015@gmail.com
2.	Emmis Njeru	DEPUTY CEO-NACONEK	emmynjeru.en@gmail.com
3.	Angelina Jinadasa	NACONEK	angelinajinadasa@gmail.com
4.	Catherine Matara	Directorate of Policy, Partnerships and East African Community Affairs	katematara15@gmail.com
5.	Galgalo Ali Guracha	Director- directorate of Vocational Training County Government of Isiolo	
6.	Wenyaa Salome	Regional director Quality Assurance & Standards (MoE)	wensal888@gmail.com
7.	Meshack Adiedo	APBET Complementary schools Association of Kenya	mcadiedo@gmail.com
8.	Joshua Ajigo	East Africa Centre for Human Rights	ajigojoshua@gmail.com
9.	Harry Thuku	Lifeskills promoters	gthuku@lifeskills.or.ke
14.	Patricia Makau	VSO Kenya	patricia.makau@vsoint.org
17.	Dinah Ntinyari	-	dinahntinyari@gmail.com
19.	Alex Oduor	NACONEK	alexoduorr2@gmail.com
20.	Ngari	-	ngari53@gmail.com
21.	Grace Waweru	Hope WorldWide Kenya	grace.waweru@hopewwkenya.org
22.	Elizabeth Mwenda	-	lizmwenda@gmail.com

Attendance

1. Harun Yussuf Mohammed – CEO / Secretary - NACONEK
2. Emmy Njeru – Deputy CEO – NACONEK
3. Joyce Amuga – MoE / NACONEK
4. Angelina Jinadasa – Consultant - NACONEK
5. Edwins Saka – Consultant - NACONEK
6. Alex Oduor – Consultant – NACONEK
7. Emma Raphael – Consultant – NACONEK
8. Martin Wafula – Consultant – NACONEK
9. Abdinasir Omar – Consultant – NACONEK
10. Dr. Chris Galgalo -
11. Irene Ngonde

12. George Harry Thuku – Lifestyles Promoters
13. Meshack Adiedo
14. Joshua Ajigo – Liaison, East Africa Centre for Human Rights (EACHRIGHTS)
15. Patricia Makau – VSO Kenya
16. Kate Matara – Director of Partnerships, East African Community Affairs
17. Wenyaa Salome – APBET (?)
18. Galgalo Ali Guracha – Director of ECDE & Vocational Training, Isiolo County Government
19. Dinah Ntinyari

11. MINUTES OF THE FARMERS' MEETING HELD ON 22 MARCH 2022 AT THE KIMWANGA CIDC AT 10 AM.

Minutes Of The Farmers' Meeting Held On 22 March 2022 At The Kimwanga CIDC At 10 Am.

I. Agenda
II. Preliminaries
III. Background Information
IV. Encouraging Farmers to Plant Soya
V. Questions & Concerns Regarding the Project
VI. Environmental and Social safeguards of the Soya/ general farming Project
VII. AOB

Min. 1/22: Preliminaries

Mrs. Margaret Sifuna (Village Elder) called the meeting to order at 10 AM. She then requested one of the attendees to do an opening prayer. Mrs. Sifuna Welcomed the Chief, who asked all the attendees to introduce themselves. The Chief then welcomed Mr. Martin Wafula of NACONEK

Min. 2/22: Background Information

Mr. Wafula provided background information on NACONEK and the ongoing project at activities at Kimwanga and in Bungoma County. He noted that the project is geared towards eliminating enabling out of school children-OOSC to go back and be retained in school. All the efforts around the project culminate in a survey that was conducted a few years back that revealed that Bungoma was one of those counties outside ASAL regions that had many OOSC.

He explained that one of the key activities that could help children remain in school is school feeding programs. He noted that if implemented as planned, the project activities connected with implementation of the Kimwanga food processing activities will feed over 300,000 children in Kenya in the next five years.

Mr. Wafula highlighted that the factory would produce ready-to-drink porridge flour for further processing, packaging and distribution in schools.

He noted that as we await full programme roll-out later on in the year. At least Five (5) schools have been identified and selected for the pilot phase in Bungoma County. Learners will be supplied with the ready to drink porridge under a comprehensive programme involving Boards of management, parents interior & government coordination ground extension system among others to restore all OOSC around those schools back to school. This will require constant collaboration and cooperation between NACONEK and the local leadership ensure programme success.

As part of the strategy, Mr. Wafula noted that parents out to participate in home-grown solutions activities by planting crops to supply to the Kimwanga factory processing. He noted that there is a potential for processing 15 tons of (Maize, Sorghum, Soya and Orange-fleshed sweet potatoes), which local communities are well placed to produce on their farms. He explained that it was the entire programs strategy wish that crop production is local farmers led

Min. 3/22: Encouraging Farmers to Plant Soya

Mr. Wafula mentioned that the main agenda for the day was to encourage farmers from communities around the Kimwanga location and adjacent regions to be to plant Soya, as it would be one of the key raw material/ ingredients used in producing the porridge flour. He noted that the factory would engage in full-scale production by August 2022. Mr. Wafula informed the farmers that planting soya would be profitable for them. Modern seeds such as SB 19, SB132, and Gazelle varieties would be used. He also outlined a proposal and costs benefits analysis for a farmers' school to teach farmers how to plant soya.

Min. 4/22: Questions & Concerns Regarding the Project

Mr. Wafula then welcomed the attendees to ask questions or give comments regarding the presentation.

a) On the possibility employment opportunities at the factory.
   - Mr. Wafula clarified that there would be a few job opportunities for casual workers from around especially from the August 2022 when full-scale production commences.
   - They will however require a health clearance certificate and be in good standing.

b) On provision of capital provision for farmers to plant Soya
   - Mr. Wafula stated that while he intends to coordinate availability of seed, he is vouching for complimentary fertilizer for the demonstration plots, capital will not be provided at the moment.

c) On assurance to farmers to buy Soya from them,
   - Mr. Wafula said there would be contract farming arrangement, farmers would however be required to take crop insurance.

d) On concerns about prior misunderstanding around the the project ownership and operation
   - Mr. Wafula advised that the farmers avoid politics the project and focus on the benefits it would bring to them and the community as a whole through their involvement in farming.

e) On the project's sustainability in keeping students in school.
   - Mr. Wafula noted that sustainability would be guaranteed the entire value chain activities starting with farmer led crop farming through processing activities, return to school of OOSC with the support of parents and local communities and the continued involvement of the government through MoE and other departments besides other partners/stakeholders involved in the project.

Min. 5/22: Environmental and Social safeguards of the Soya/ general farming Project

Mr. Wafula explained to participants, the need for Environmental and Social safeguards that are farmers need to put in place in order to mitigate the likelihood of an adverse environmental impact.

He noted that Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.

(iv) To establish clear procedures and processes for the environmental management.

(v) Specify appropriate roles and responsibilities in environmental impacts monitoring, and outline the necessary reporting procedures, for managing any environmental and social concerns that may arise.

(vi) To determine the training, capacity building and technical assistance needed by community members to successfully implement the Environmental and Social Management Plans (ESMPs).

Overall it was noted that outputs of this project are positive and will translate into multiple positive economic and social outputs/ outcomes such as:

j) Improved environmental management through good agricultural production practices
k) Reduced pollution through integrated pest management systems.
l) Increased agricultural production/ productivity for the small-holder farmers

m) Increased marketing opportunities through the Kimwanga processing plant
n) Reduced post-harvest losses of agricultural produce and subsequent increased food and nutritional security;
o) Improved household and community incomes hence improved living standards, food security and improved nutrition through diversified food supplies.
p) Increased employment opportunities both directly and indirectly by people employed during the development works as well as those who will be employed in agro-processing, marketing, sale of farm inputs, etc.
q) Improved agricultural production skills through training and extension services coordinated by NACONEK and other stakeholders
r) Increased environmental management skills through capacity building of farmers and other community members involved in the project

Some of the Soya farming based activities listed that are likely to have an adverse impact on the environment as well as the proposed practices that will mitigate against adverse environmental impacts are listed below

Adopting Soil conservation measures like;
- Planting in counters bands
- Planting green hedges around farms
- Not farming at least 3 meters away from river banks
- Timely spreading out of compost/ farmyard manure on farms
- Practicing crop rotation
- Use of Muguna plant to replenish and recharge the soils during the off season period
- Practicing crop rotation
- Use of regenerative Agricultural practices
- Use of crop rotation practices
- strict application of climate agriculture
- Adherence to water extraction policies/processes
- Adherence to environmental conservation measures
- Adoption of Integrated past management systems

As a general rule the members of the community undertake to maintain climate smart agriculture practices

Min: 5/22: AOB
The Area Chief spoke to the farmers on the significance of cooperation to make the project successful. He also spoke about the importance of keeping children in school and how this project would help accomplish this goal. He also discouraged the farmers from politicking the project.

Min: 6/22: Adjournment
There being no other business, the meeting adjourned with a prayer from one of the attendees. The date of the next meeting has not been revealed yet.

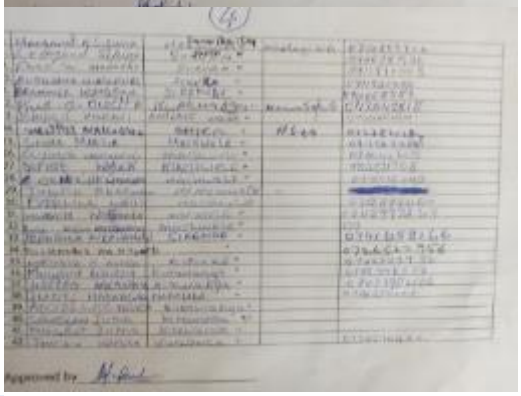
Minutes by: Mercy Juma, Secretary 22/3/2022

Confirmed by: Martin Wafula

Scanned Attendance lists


National Council for Nomadic Education in Kenya
ATTENDANCE LIST


National Council for Nomadic Education in Kenya
ATTENDANCE LIST



12. MINUTES OF THE FARMERS' MEETING HELD ON 22 MARCH 2022 AT KOPSIRO, MT. ELGON Sub County FROM 3 PM.

Minutes Of The Farmers' Meeting Held On 22 March 2022 At Kopsiro, Mt. Elgon Sub County From 3 Pm.

Agenda

1. **Preliminaries**
2. **Background Information**
3. **Encouraging Farmers to Plant Soya**
4. **Questions & Concerns Regarding the Project**
5. **Environmental and Social Impact Assessment**
6. **AOB**

Min. 1/22: Preliminaries

Mr. Saasita Juma brought the meeting to order at 3 PM. He then requested one of the attendees to pray. Mr. Juma welcomed everyone and asked all the attendees to introduce themselves. He then welcomed Mr. Martin Wafula.

Min. 2/22: Background Information

Mr. Wafula provided background information on NAKONEC and the ongoing project at Kimwanga. Mr. Wafula provided background information on NACONEK and the ongoing project at activities at Kimwanga and in Bungoma County.

He noted that the project is geared towards eliminating enabling out of school children-OOSC to go back and be retained in school. All the efforts around the project culminate in a survey that was conducted a few years back that revealed that Bungoma was one of those counties outside ASAL regions that had many OOSC.

He explained that one of the key activities that could help children remain in school is school feeding programs. He noted that the implementation of project activities at the Kimwanga food processing activities will feed over 300,000 children in Kenya in the next five years.

Mr. Wafula highlighted that the factory would produce ready-to-drink porridge flour for further processing, packaging and distribution in schools.

He noted that as we await full programme roll-out later on in the year. At least Five (5) schools have been identified and selected for the pilot phase in Bungoma County with MT Elgon included. Learners will be supplied with the ready to drink porridge under a comprehensive programme involving Boards of management, parents interior & government coordination ground extension system among others to restore all OOSC around those schools back to school. This will require constant collaboration and cooperation between NACONEK and the local leadership ensure programme success.

As part of the strategy, Mr. Wafula noted that parents are expected to participate in home-grown solutions activities by planting crops to supply to the Kimwanga factory processing. He noted that there is a potential for processing 15 tons of (Maize, Sorghum, Soya and Orange-fleshed sweet potatoes), which local communities are well placed to produce on their farms. He explained that it was the entire programs strategy wish that crop production is local farmers led

Min. 3/22: Encouraging Farmers to Plant Soya

Mr. Wafula mentioned that the main agenda for the day was to encourage the farmers to plant soya, as it would be one of the raw materials used in producing the porridge flour. He noted that the factory would engage in full-scale production by August 2022. Mr. Wafula informed the farmers that planting soya would be profitable for them. He also asked whether one of the farmers would volunteer a small plot for a demonstration to teach farmers how to plant. He also noted that farmers could plant other raw materials like Sorghum and orange-fleshed sweet potato.

Min. 4/22: Questions & Concerns Regarding the Project

Mr. Wafula then welcomed the attendees to raise any questions or concerns regarding the project.

f) On selling their produce.
   - Mr. Wafula clarified that contract farming would be applied, and farmers would sell to NACONEK.

g) On seed provision for farmers
   - Mr. Wafula stated that he would coordinate availability seeds for planting by the communities

h) There was also a question regarding how soon the seeds would be provided, as the rainy season had already begun in Mt. Elgon.
   - Mr. Wafula said he was there to confirm whether willing parties were ready to plant soya so that the seeds could be provided. He highlighted that the seeds could be delivered in a week if possible.

Min. 5/22: Environmental and Social safeguards of the Soya/ general farming Project

Mr. Wafula explained to participants, the need for Environmental and Social safeguards that are farmers need to put in place in order to mitigate the likelihood of an adverse environmental impact.

He noted that Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.

(vii) To establish clear procedures and processes for the environmental management.

(viii) Specify appropriate roles and responsibilities in environmental impacts monitoring, and outline the necessary reporting procedures, for managing any environmental and social concerns that may arise.

(ix) To determine the training, capacity building and technical assistance needed by community members to successfully implement the Environmental and Social Management Plans (ESMPs).

Overall it was noted that outputs of this project are positive and will translate into multiple positive economic and social outputs/ outcomes such as:

s) Improved environmental management through good agricultural production practices
t) Reduced pollution through integrated pest management systems.
u) Increased agricultural production/ productivity for the small-holder farmers
v) Increased marketing opportunities through the Kimwanga processing plant
w) Reduced post-harvest losses of agricultural produce and subsequent increased food and nutritional security;
x) Improved household and community incomes hence improved living standards, food security and improved nutrition through diversified food supplies.
y) Increased employment opportunities both directly and indirectly by people employed during the development works as well as those who will be employed in agro-processing, marketing, sale of farm inputs, etc.

z) Improved agricultural production skills through training and extension services coordinated by NACONEK and other stakeholders
aa) Increased environmental management skills through capacity building of farmers and other community members involved in the project

Some of the Soya farming based activities listed that are likely to have an adverse impact on the environment as well as the proposed mitigation measures are listed below

Likely Impact	**Mitigation**
Soil entrainment from the farm to downstream sections	Adopting Soil conservation measures like ▪ Contours ploughing ▪ Planting green hedges around farms ▪ Not farming at least 3 meters away from river banks
The Maintenance of Soil fertility	▪ Timely spreading out of compost/ farmyard manure on farms ▪ Practicing crop rotation ▪ Use of Muguna plant to replenish and recharge the soils during the off season period ▪ Practicing crop rotation
General Farming practices	▪ Use of regenerative Agricultural practices ▪ Use of crop rotation practices ▪ strict application of climate agriculture ▪ Adherence to water extraction policies/processes ▪ Adherence to environmental conservation measures ▪ Adoption of Integrated past management systems

As a general rule the members of the community undertake to maintain climate smart agriculture practices

Min: 5/22: AOB
Mr. Juma took the time to explain what had been said to the farmers in their mother tongues to ensure that they understood the Agenda.

Min: 6/22: Adjournment
There being no other business and with the sudden heavy rains, the meeting adjourned. The date of the next meeting has not been revealed yet.

Minutes by: Mercy Juma, Secretary 22/3/2022 **Confirmed by:** Martin Wafula

Farmers from Kopsiro attending the meeting convened by NACONEK

13. Human Capital Pillar Education and Health 4th April 2022, Hilton Hotel.

PILLAR 3 MEETING: HUMAN CAPITAL PILLAR EDUCATION AND HEALTH
4TH APRIL 2022, HILTON HOTEL, NRB

Ending Drought Emergency:

Agenda

1. Introduce the IMPRESSED programme and align indicators to MTP4
2. Enhance linkages for both National and County Level programs
3. Receive views from the participants on the programme

Members Present

The meeting drew participants from National Drought Management Authority (NDMA), Ministry of Devolution and ASALs, Ministry of Education, Commission for University Education, Technical and Vocational Education, Teachers Service Commission and Ministry of Health.

Min: 1:4:22 Alignment of Priorities to MTP4 and IMPRESSED

The members were brought on board on what IMPRESED programme entailed and aligned the priority areas to the MTP4 which was being developed. Key areas discussed and aligned included:

1. Low Cost Boarding Schools and new interventions for WASH
2. Climate Proofing Mechanism for schools and disaster management strategies in ASALs
3. Skills development strategies for ASALs
4. Use of ICT in Education in ASALs to enhance access and quality education

Comments from the Team

NDMA Team:

- Appreciated the WASH component for it will improve access and retention in Low Cost Boarding Schools that was inadequate. The team emphasized on provision for disability friendly WASH facilities

ASALs Member:

- Emphasized on multi-sectoral approach in the implementation to avoid duplication and wastage.

Technical and Vocational Training:

- Proposed Youth sensitization on skill development to increase enrolment in TVET centres in ASALs since low enrolments in TVET was leading to Youth wastage in ASALs

The, members appreciated the new intervention NACONEK had proposed and assured support during the implementation.

Attached is the list op participants.

Attendance List

NATIONAL COUNCIL FOR NOMADIC EDUCATION IN KENYA

NACONEK

ACTIVITY: EDE PILLAR 3 MEETING

VENUE: HILTON HOTEL DATE: 4TH APRIL, 2022

ATTENDANCE LIST

S/No.	Name	Designation	Organization	Email address	Signature
1.	Kipkemoi Samuel	ADSP	TVETA	samuel.kipkemoi@tveta.go.ke	[signature]
2.	Josephine Nyangaga	MOE-DDQAS	MOE	josephinenyangaga@gmail.com	[signature]
3.	Claris Adoyo	Planning Officer	CUE	cadoyo@cue.or.ke	[signature]
4.	Judy Kabathi	DRO	MOE	kabathijudy@gmail.com	[signature]
5.	Raymond Uluma	Planning Officer	KNEC	ruluma@knec.ac.ke	[signature]
6.	Sophie Telee	PO	NDMA	sophietelees@gmail.com	[signature]
7.	Richard Kering	P.P.O.	ASALs/SD&A	richardkering2@gmail.com	[signature]
8.	Paul Obunde	ADPMO	NDMA	paul.obunde@ndma.go.ke	[signature]
9.	Lilian Wambui	PO	NDMA	lilian.wambui@ndma.go.ke	[signature]
10.	Aaron Kiruru	[illegible]	Mou - Dpl	[illegible]@gmail.com	[signature]
11.	Emis Njeru	DDE	NACONEK	[illegible]	[signature]
12.	Brenda Atieno	Intern	NDMA	brendatieno1[illegible]@gmail.com	
13.	Hellen Awia	DDE	MOE	aavira7@gmail.com	[signature]
14.					

14. Marsa bit County Public participation Virtual Meeting Held On 6th April 2022, At NACONEK's Boardroom

Minutes of the Marsabit County Public participation virtual Meeting held on 6th April 2022 from 10 Am.

Objectives of the Meeting

17. To inform of the need for rolling out IMPReSED activities target schools in Marsabit County
18. To establish the viability of Marsabit and sustainability for implementation of the IMPRESED program.
19. Establish context information about Marsabit County (Poverty, out of school children-OOSC, Access, retentions in schools and sustainability needs among others)
20. Fears/ recommendations….

Agenda

1. Preliminaries
2. Background Information
3. IMPReSED Programme presentations
4. Comments Questions & answers Regarding the proposed Project
5. AOB

Min. 1/ April/22: Preliminaries

Mrs. Joyce Amuga (NACONEK) called the meeting to order at 10 AM. She then requested one of the attendees to do an opening prayer. Mr. Boru Guyo offered to lead the team in the opening prayers

Mrs. Joyce Amuga welcomed all the attendees and asked them to introduce themselves.

Mrs Emis Njeru (NACONEK Deputy CEO) gave opening remarks noting that this is an important aspect of before the anticipated roll-out of the IMPReSED program. She noted that we looked forward to informing and collecting their views and feedback on the programme so that we could escalate the potential benefits and forestall any potentially adverse situations.

She expressed gratitude for all participants who availed themselves far, this important meeting, she noted that this intervention is aimed at discussions to improve the access retention of learners in 10 location counties targeted. She very much looked forward to hearing participant views concerning the programme and activities. Especially amplifying key priorities for Marsabit. As NACONEK, we have realized there are also so many learners who are out of school. There is need to know how we can address such. She commented on issues around expansion of low cost boarding school, it's the facilities among others.

Joyce Amuga then ran through the objectives of the meeting and requested **Mr. Martin Wafula (NACONEK)** to run through the presentation

Min. 2/ April/22: Background Information/ IMPReSED Programme Presentations

Mr. Wafula provided background information on NACONEK and the ongoing Integrated Mechanism of Poverty Reduction Strategy for Sustainable Education and Development-IMPReSED programme activities at large and in Marsabit County. He noted that the IMPReSED programme is geared towards enabling out of school children-OOSC to go back and be retained in school and reducing poverty with financial support from AfDB and potential partners.

He noted that the genesis of all efforts around the programme was a baseline survey that was conducted sometimes back by NACONEK in collaboration with other partners notably UNICEF.

He explained IMPReSED as a five-year programme that is expected to run from June this year for a period of five years. He noted that the programme has 4 component on: 1. Access, 2. Quality education, a component on skills, competencies & training

Objectives

1. Increase enrolment and retention in quality primary education for 455,000 OOSC through Community economic empowerment and Community-led conversations in 12 ASAL counties

2. Strengthen quality teaching and learning in 300 model schools and improve inclusive and gender-based access to a safe learning environment including implementation of CBC, Blended learning, continuous professional development of teachers

3. Improve educational service delivery through system capacity strengthening with digital data platform and Duksi Integration

4. Expand skills training and provide equal learning opportunities for smooth transition to the world of work including job creation for youth

Mr. Wafula shared the IMPReSED programme long term results to communities

1. Increased Peace and Stability - Communities settle into peaceful groups with water and food Security, livestock feeding, briquettes and market linkage

2. Reduced Youth Radicalization - Youth are engaged in fair employment

3. Reduced Poverty - Household Income increases from 1$ to 3-5$ per day

4. Reduced Impacts of climate change - Increased Canopy Cover/carbon emission reductions

5. Better Health and Food Security - Monthly tracking reporting with CHW

6. Positive Advocacy, Community and Social Media Campaigns

7. Increased Literacy of community - including financial and digital

Mr. Wafula also ran through and explained some of the barriers to Education that the IMPReSED programme is addressing i.e.

1. Poverty

2. Climate Change

3. Water Scarcity

4. Food Scarcity

5. Malnutrition

6. Negative Attitudes

7. Child Marriage

8. Child Labor

9. Conflict and instability

10. Pandemic

He revealed that Marsabit was one of those targeted counties and in particular 3 schools and once Vocational Training centre had been identified for the implementation of phase 1 of the project.

Mr. Wafula explained details about the IMPReSED programme and some of the activities expected to be rolled out including: **development of a Safe house, provide a water Solution, develop Pastures/Goat Lot, possibility of developing up to 20-acre Farm, implement Academic Advantage activities, establish a Micro Hub, build Staff quarters, carry out Fencing activities** among others.

He then invited comments from participants

Min. 3/ April/22: IMPReSED Programme Presentations Comments Questions & answers regarding the proposed Project.

1. What informed the choice of schools. Participants advised that there are certain inherent dynamics that are at play.
   a. A physical one-on-one meeting in order to connect with ground situation would be very helpful
   b. The choice of schools should be balanced out in all regions of Marsabit i.e. Laisamis, Marsabit central, Northhorr and Moyale.
   c. Avoid selecting schools that fall in one ethnic community as this might result to conflict between communities living.
   d. There are some schools like St. Teresa Primary School that draw learners from across the ethnic divides
   e. There are other schools still that are located in locations where only one community attend hence the programme implementation have to careful about such.

2. The meeting was informed that sub-counties of Laisamis and Moyale have a huge number of OOSC children and that it will be worthwhile should therefore have been considered.

3. Participants noted that parents are willing to "give" OOSC through the program, however there contribution towards the learning is limited. The implementation of this program. The other components of programme are thus

4. It was noted that UNICEF has a programme in the county that is similar to what IMPRESED programme intends to do and that is targeting schools in the same sub-counties. This led to suggestion that schools chosen should target other sub-counties which are equally in need.

Min. 4/April/22: AoBs.

It was noted that some people were not able to attend due to internet connectivity problems. They requested a follow-up meeting on a day that most participants are at their bases and thus able to attend.

It was unanimously agreed that a follow-up virtual meeting be held on Friday 8th April, 2022.

Min: 5/ April/22: Adjournment

There being no other business, the meeting adjourned with a prayer from one of the attendees. The date of the next meeting is Friday 8th April, 2022.

Minutes taken by: Martin Wafula, Secretary 6th /4/2022

Confirmed by: Emis Njeru

Participant's lists

Name	Email Address	Designation
Titus Mbatha Tel. 0725588905	mbathatitus@gmail.comcdemarsabit@gmail.com	County Director of Education.
Habiba	habiba3094@gmail.com	NEMA
Isacko Dalacha	dalachaisacko@gmail.com	Social Protection
Mr. Boru Guyo	guyoboru2006@gmail.com	County 235department of education
Hussein Harub Tel. 0723926848	husseinharub@yahoo.com	MOE
Mumasi Wanyama	mumasiwanyama@gmail.com	CQASO MOE

Joyce Amuga Tel. 0721 416062	amugajoice@gmail.com	
Martin Wafula Tel. 0723842217	Martinwafula2001@yahoo.com	

ANNEX 1 Screenshot of Attendants List.